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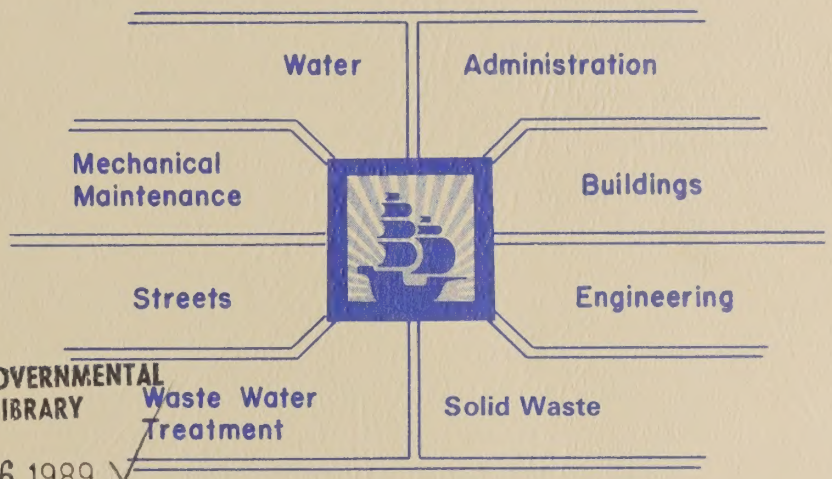
1987-88

Department of
Public Works



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1987-88
Annual Report

City of Santa Maria

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CITY OF SANTA MARIA • 110 EAST COOK STREET • SANTA MARIA, CALIFORNIA 93454 • (805) 925-0951

Department of Public Works

April 1, 1989

Mr. Robert F. Grogan
City Administrator
City of Santa Maria
110 East Cook Street
Santa Maria, CA 93454-5190

Dear Bob:

Transmitted herewith is this department's 1987-88 fiscal year report, which is the 18th, in keeping with our established tradition of this department. Contained in this report for recordation are the significant departmental activities which have occurred during this time period.

We have attempted to include in this report material of statistical and historical value, as well as information of personal interest.

It is appropriate here to express our appreciation to the rest of the City staff for the cooperation and assistance which contributed to our departmental accomplishments. We are even more grateful for the understanding received for our failures. We look forward to the continuing opportunity to make a contribution toward the total City government's service to its community.

Very truly yours,

Reese N. Riddiough

REESE N. RIDDIOUGH, P.E.
Director of Public Works

Attachment

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CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
EXISTING ORGANIZATION CHART

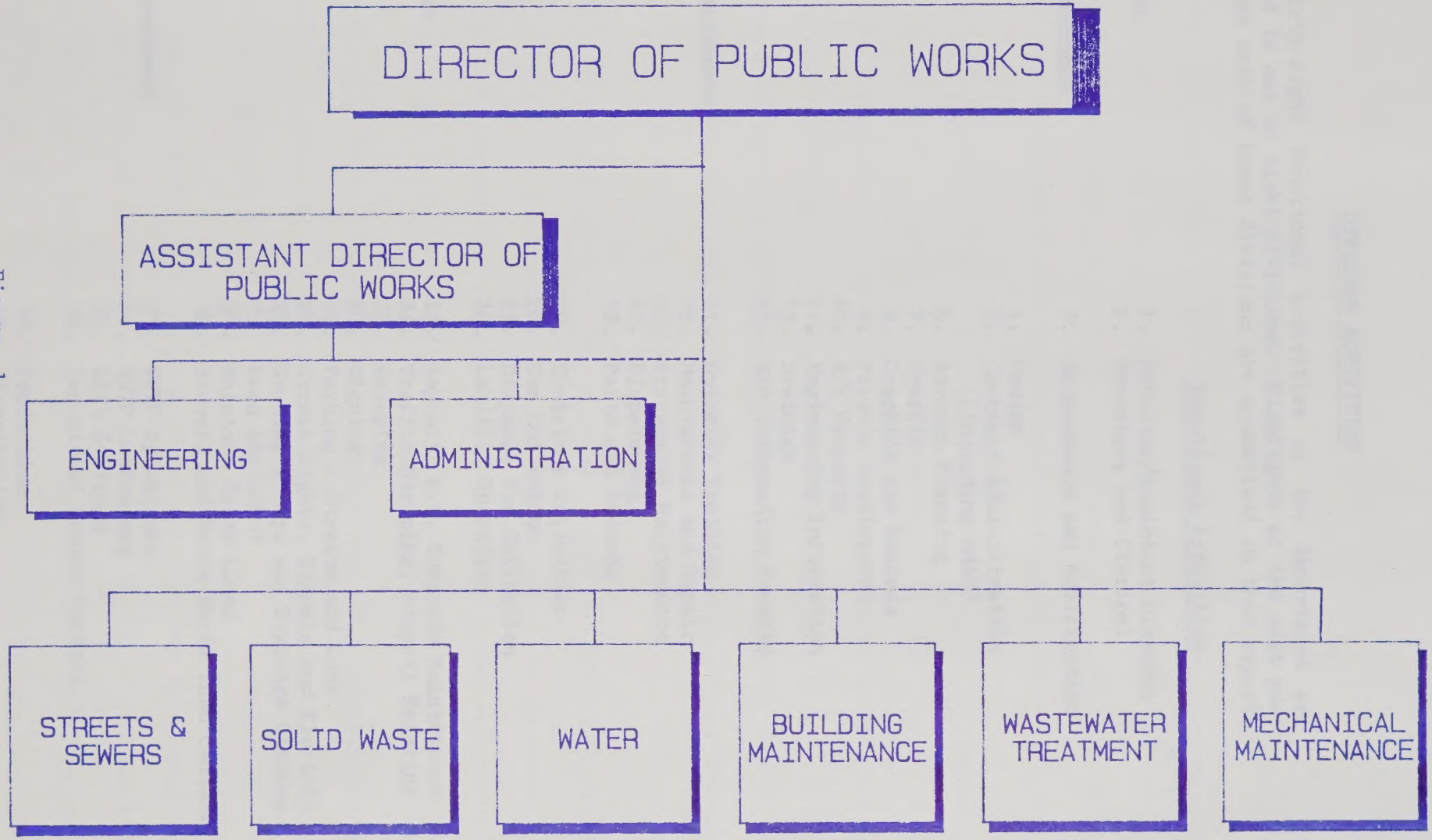


Figure 1

DIVISION ACTIVITIES

The thirty-eight functional activities of the department are assigned to one of eight divisions. Highlights of the past year regarding each of these divisions are summarized in this report.

Division	Functional Activities
Administration	1. Director/Assistant Director 2. Secretary and Clerical
Building Maintenance	3. Maintenance and Modification
Engineering	4. Design 5. Contract Administration (including SMAT) 6. Advance Planning 7. Traffic 8. Graphics and Records 9. Private Development 10. R/W Property 11. Engineering Information 12. Drainage 13. EIR Information Reports
Mechanical Maintenance	14. Operator Training 15. Maintenance and Repair 16. Preventive Maintenance 17. Dispatching 18. Parts and Records
Solid Waste	19. Container Collection 20. Can Collection 21. Disposal Fee Collection 22. Landfill Operation
Street & Sewer	23. Asphalt, P.C. Concrete Maintenance 24. Traffic Striping, Stencil Painting 25. Sweeping 26. Signing 27. Parking - Streets and Lots 28. Street Lights, Signals and Electric 29. Grading Alleys and Drainage Ditches 30. Weed Abatement 31. Maintain Sewer Lines 32. Stowell and Santa Maria Town Centers
Wastewater Treatment	33. WWTP Operations 34. WWTP Laboratory 35. Lift Stations 36. Industrial Source Control
Water	37. Production 38. Distribution

ADMINISTRATION DIVISION

This division, comprised of four full time employees and one permanent part time employee, is the smallest in the department. However, the role of the Administration Division plays an important part in the success of the programs/services of the other seven divisions in the department.

The primary function of this division is to provide the administrative direction and clerical support of all activities of the Public Works Department, including coordination of Program Planning, Budget Preparation and Control, Personnel Administration, Supervisory Training for Clerical Staff, Administrative Reports, Records Management Program, Investigation and Follow Up of Citizen Concerns, Word Processing, and Providing Continuity of Division Activities.

This division contributes to the final decisions in program planning, determining which new or additional projects/services should be initiated and when they should be implemented. Once all facts are gathered for the project, it is included in the fiscal budget request at the appropriate time.

Administration Division reviews and assures that the department's 15 budget requests, in addition to the four (4)-year capital improvement budgets, are accurate and completed on time.

During the past fiscal year, administration has recruited for, scheduled interviews, and processed part time employees in the Administration, Building Maintenance, Solid Waste and Water Divisions. Additionally, payroll changes were processed for 124 full and part time employees who worked in the Public

Works Department during the year. This division has also conducted six employee disciplinary action hearings for various employees within four divisions of Public Works and, on a continuing basis, assure that the City's policies and procedures are followed.

Administration also coordinates and schedules reports/recommendations for Council consideration and approval, assuring their completeness and accuracy, and prepares the accompanying resolution/ordinance if required; prepares the Departmental Annual Report with input from the various divisions; prepares, reproduces and binds public contract specifications for bidding purposes, in addition to all other reports and formal documents that are initiated by the Public Works Department.

This division manages the Records Management Program with assistance and input from the various divisions. Old files are scheduled for retention, storage and eventually destruction in accordance with the time schedules outlined in the Records Manual established for the Public Works Department. Additional files are created as deemed appropriate and purged when necessary.

Administration staff, being the initial contact with the public, is the first to learn of specific concerns from citizens. After obtaining all pertinent information, an investigation is underway to assist the individual. If it is beyond the scope of knowledge of this division's staff member or if another division staff member may better assist the citizen, the concern is passed on to that individual who can efficiently answer all questions.

The department's entire typing workload is accomplished by the use of Word Processing through four computer terminals, connected by telephone line to the Hewlett Packard 3000 main frame at City Hall. This has proven to be a

valuable tool to maximize the available staff time and to produce higher quality work; however a number of inconveniences experienced with the system since the department is not directly connected to the main frame, such as line trouble and power surges causing delays and down time, still persist. In the future, hard wire connection with the main frame system at City Hall is planned, which should eliminate the difficulties.

During July and August 1987 the Solid Waste Division implemented an automated collection system for residential service subscribers. During that time the clerical staff spent a great deal of time responding to citizen concerns about the changeover. It was a stressful time for citizenry and staff alike, but the concerns were all handled in a professional and timely manner.

At the beginning of this reporting period a budgeted position for a Typist Clerk II was reclassified to a Secretary II position. Marian Hollywood transferred from Recreation and Parks Department to fill that position. The additional Secretary II allowed the clerical pool to be split into two units providing Engineering and Operations each with a unit. Darleen Vallejo was hired on a temporary, part time basis in September 1987 and was reclassified to permanent part time in January 1988. The organizational changes and personnel additions were a welcomed addition of staff expertise and staff hours.

Personnel Notes

The total number of employees working in the Public Works Department in all divisions during fiscal year July 1, 1987 to June 30, 1988 was 121. Included in this figure were 97 permanent full-time employees working 40 hours/

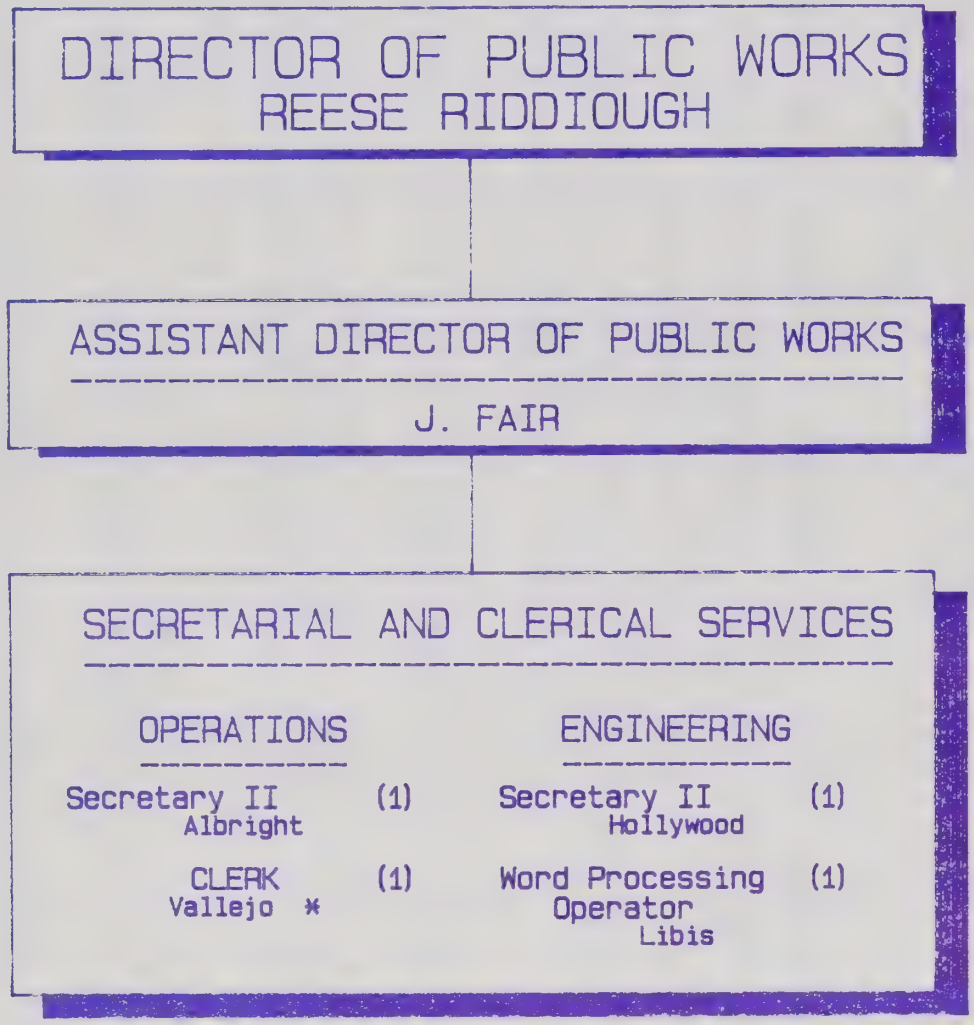
week and 24 part-time employees working less than 20 hours/week to 32 hours/week.

The number of full-time positions vacated in the department as a result of employees who left the City for personal reasons consisted of the following:

1 -	Maintenance Worker II	Bret Boyle	Water	08/29/87
1 -	Maintenance Worker II	Wayne Bryant	Water	03/12/88
1 -	Maintenance Worker II	Mike Knopf	Solid Waste	04/30/88
1 -	S.W. Insp. Coordinator	Carol McBirnie	Solid Waste	08/13/87
1 -	Traffic Signal Technician	Ron Smith	Streets	02/05/88

The above constitutes a turnover rate of 4.1% for all full-time employees who left the Public Works Department during the fiscal year. In addition to the departure of the above employees, there has been the normal turnover in the part time category (11 employees).

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
ADMINISTRATION DIVISION
EXISTING ORGANIZATION CHART



* Permanent Part Time

Figure 2

BUILDING MAINTENANCE DIVISION

The Building Maintenance Division has the responsibility for maintenance and modification of city buildings. The tasks involve all functions in the operation and upkeep of city buildings within the responsibilities, skills and capabilities of this Division.

The total tasks completed during fiscal year 1987-88 categorized into materials and contract services amounted to $81,001.86; $21,060.48 was contract service with 21,862 staff-hours which includes full time, permanent part time, part time custodians and work aides of which 257 man hours were Neighborhood Youth Corps and borrowed hours from other divisions.

Highlights of tasks completed for fiscal year 1987-88 were as follows:

1. Replaced old chlorine gas system at the Paul Nelson Pool with new sodium hyprochloride system, thereby eliminating the liabilities of a lethal gas in areas of public use.

2. Rebuilt the emergency lighting system at the main library.

3. Fabricated and installed new cabinets in the personnel office at City Hall.

4. Constructed an 8' x 12' storage building for Solid Waste at the Public Works Yard.

5. Covered racketball court at Minami Center with sunguard screen.

6. Removed mission tile from the roof of the old post office. This tile is no longer manufactured and will be used for roof repair on old city buildings.

7. Completed the Veteran's Memorial Building exterior painting project.

8. Supervised the termite fumigation of City Hall.

9. Fabricated and installed new counter tops in the wastewater supervisor's office.

10. Constructed a monument and installed plaques for the "Four Corners" Historial Landmark at Broadway & Main.

11. Installed new heat pump at Valley Developer's Office which is located in the Broadway module.

12. Painted exterior of Minami Center.

13. Constructed a fire proof paint storage room in the carpenter's shop per O.S.H.A. standards.

14. Installed conduit inner ties for communications and power between Public Works main yard and Public Works annex.

15. Remodeled kitchen at Veteran's Memorial Center to include new stainless sinks and a 750 gallon grease interceptor.

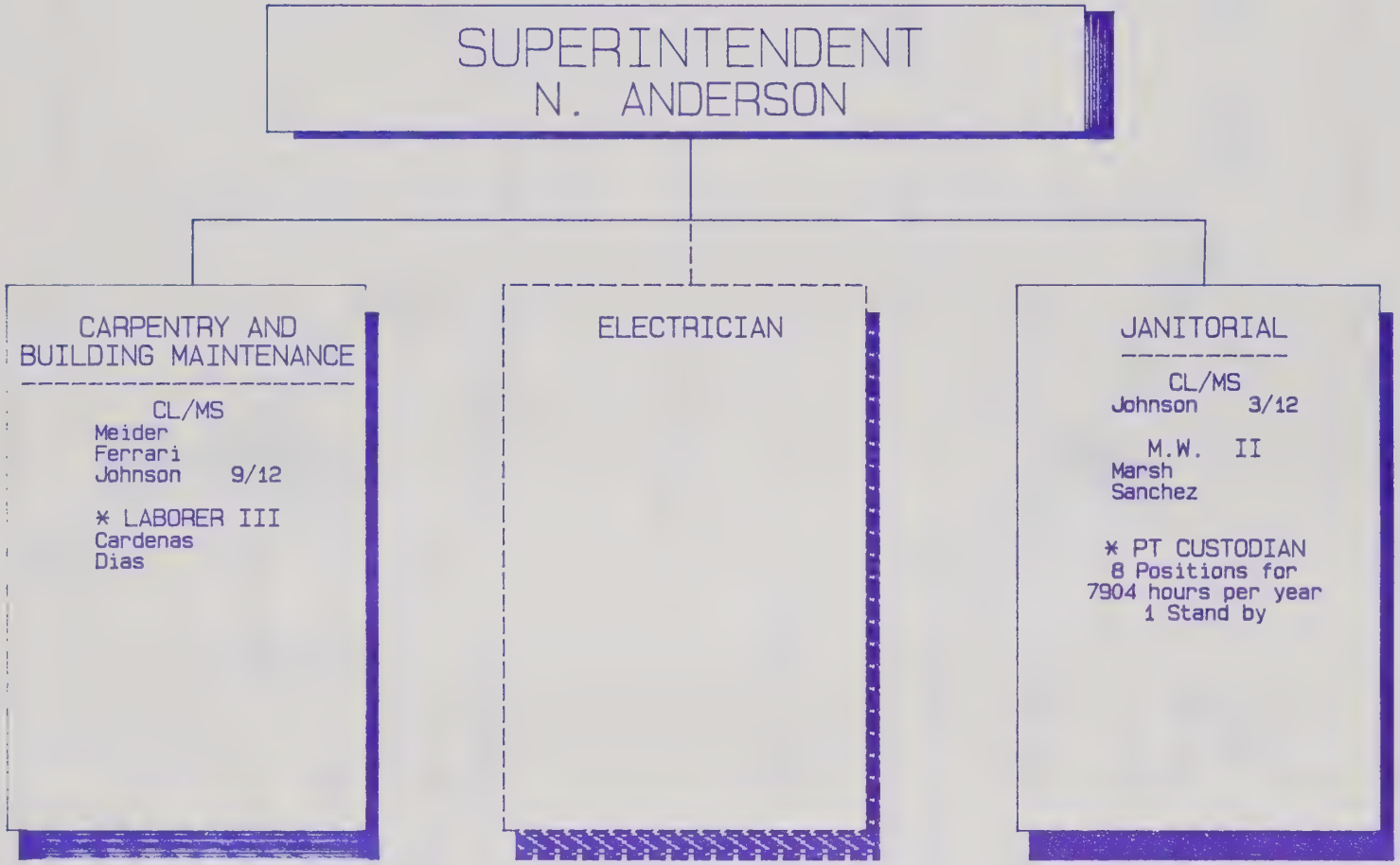
16. Excavated and repaired construction error concerning site drainage around the perimeter walls of Minami Center.

17. Painted walls and ceiling of apparatus room at Fire Sta. #2.

18. Installed new compressor in the air conditioning unit for the laboratory at the wastewater treatment plant.

19. Retube boiler at Paul Nelson Pool and repaired fiberglass on sand filters.

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
BUILDING MAINTENANCE DIVISION
EXISTING ORGANIZATION CHART

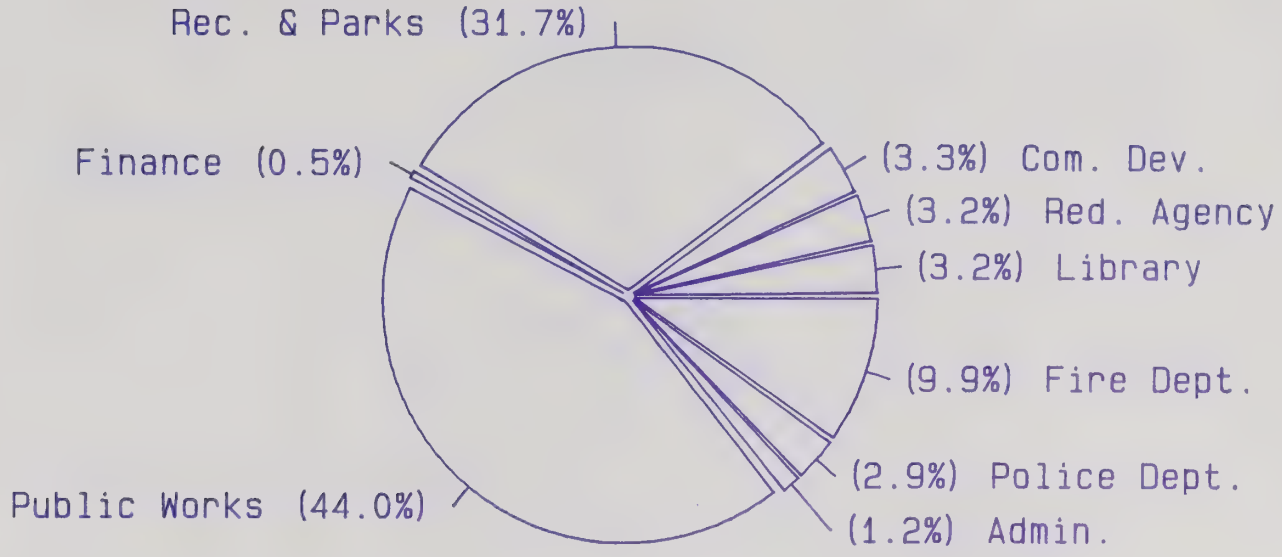


* Part-time

Figure 3

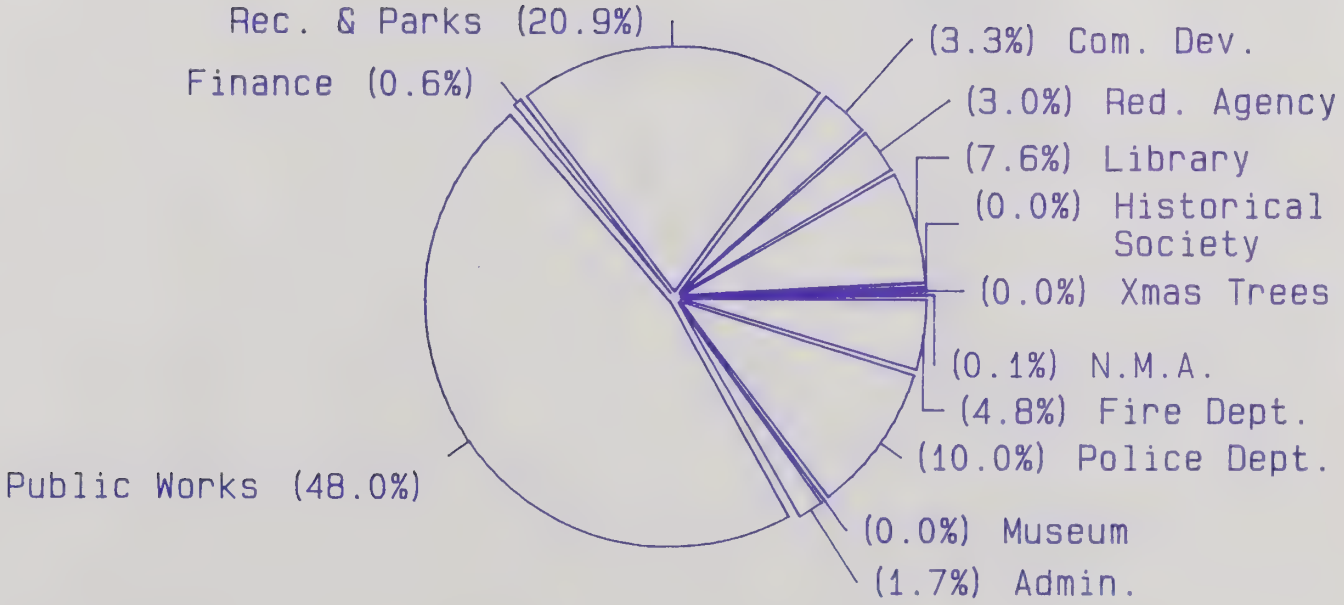
CITY OF SANTA MARIA

BUILDING MAINTENANCE DIVISION
WORK PERFORMED FOR DEPARTMENTS
Materials Cost



TOTAL COST= $81,001.86

Total Hours



TOTAL= 21,862.5
(Incl. 257 Borrowed Time)

Figure 4

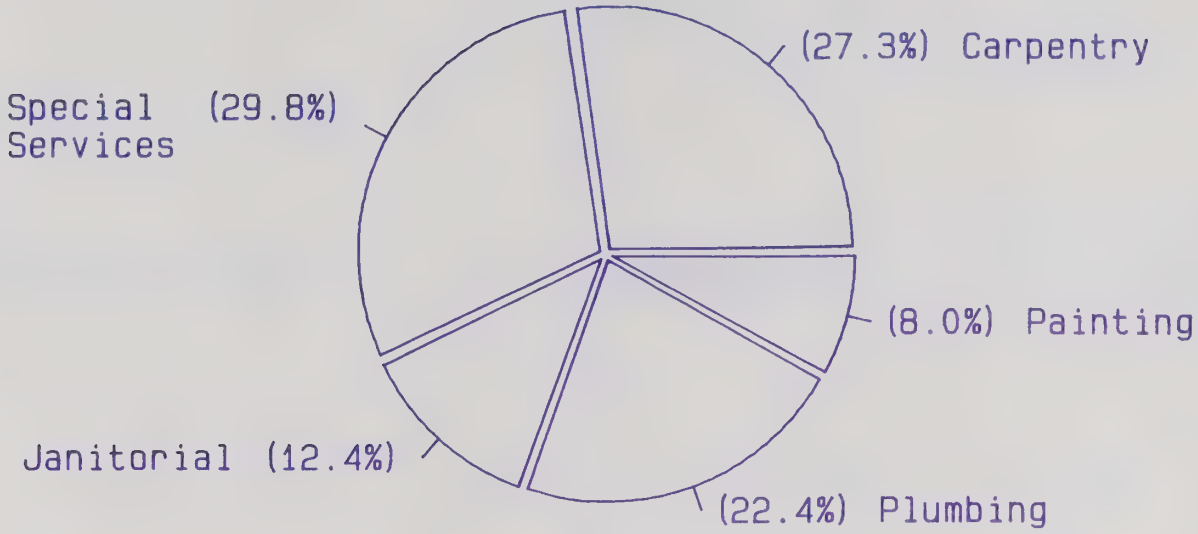
ARBMD (11, 12)

CITY OF SANTA MARIA

BUILDING MAINTENANCE DIVISION

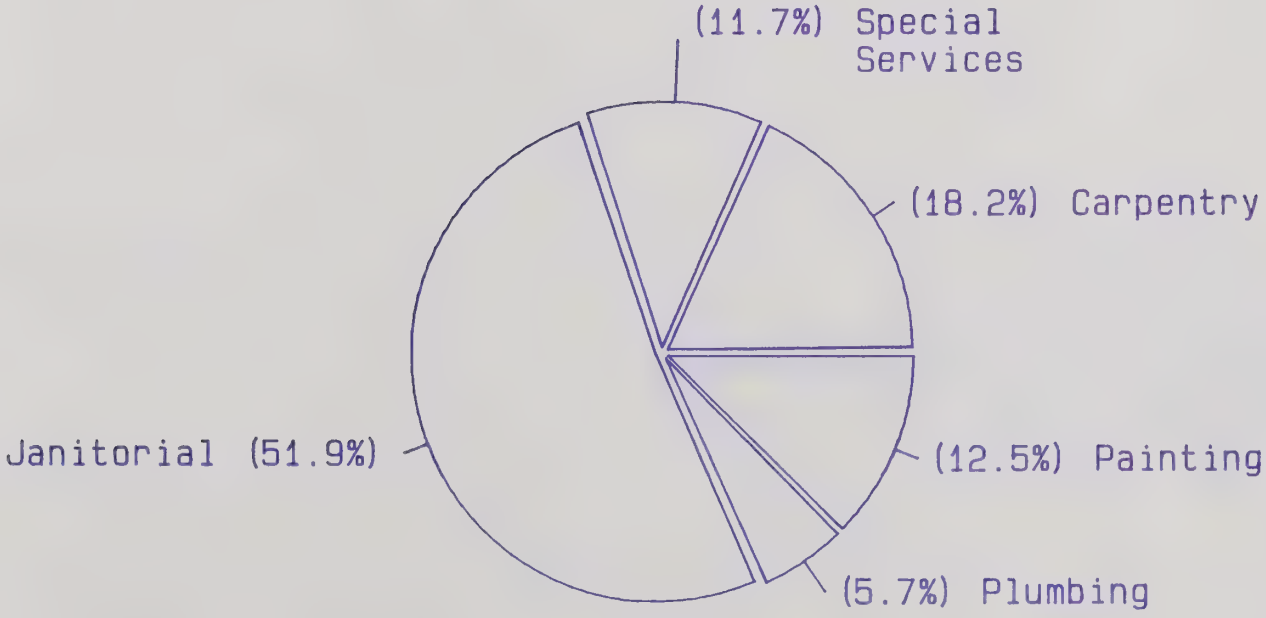
WORK CATEGORY PERFORMED

Materials Cost



TOTAL COST= $81,001.86

Total Hours



TOTAL= 21,862.5
(Incl. 257 Borrowed Time)

Figure 5

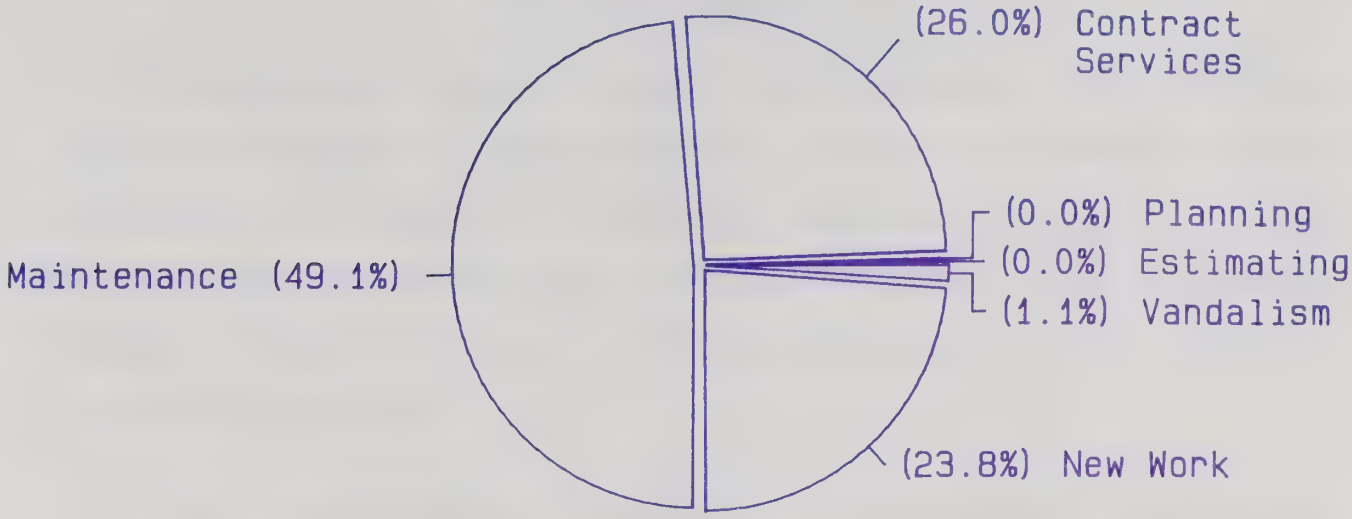
ARBMD (21, 22)

CITY OF SANTA MARIA

BUILDING MAINTENANCE DIVISION

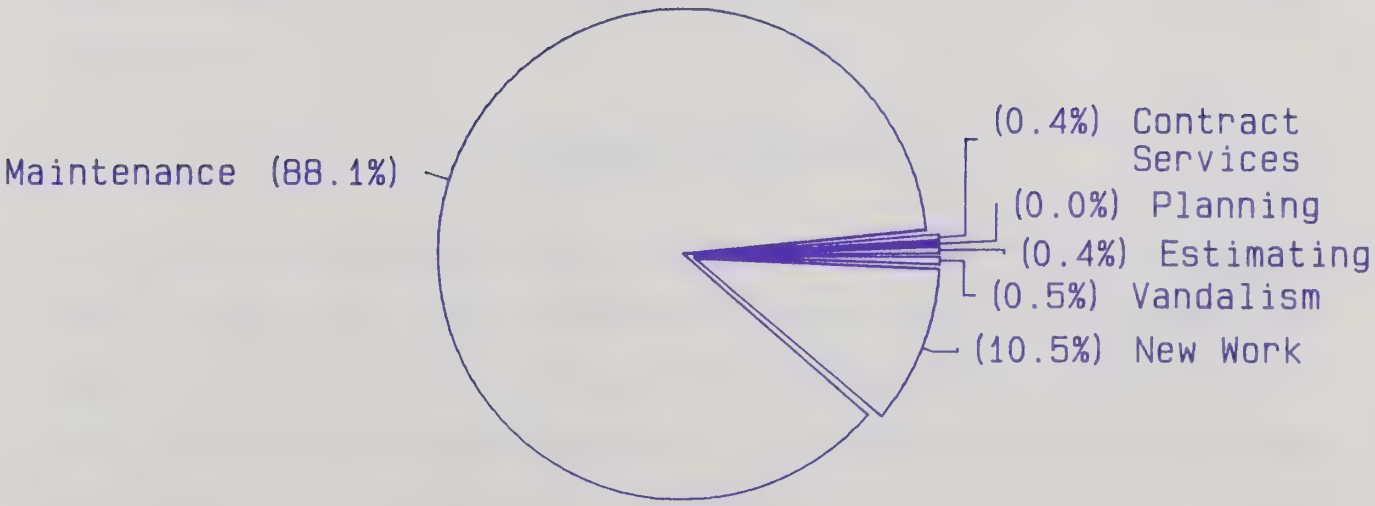
WORK TYPE/CAUSE PERFORMED

Materials Cost



TOTAL COST= $81,001.86

Total Hours



TOTAL= 21,862.5
(Incl. 257 Borrowed Time)

Figure 6

ARBMD (31, 32)

ENGINEERING DIVISION

Organization and Resources

The Engineering Division provided design engineering and construction engineering services as needed for planning, design and construction of public facilities. The division has a personnel complement of twelve full-time employees (including the Assistant Director of Public Works) and one part-time employee. Figure 7 indicates the division's organizational structure and the personnel assignments.

Figure 8 shows the major activities of this division with respective approximate costs as a percentage of the division's total salary allocation. The total amount includes regular, overtime and part-time salaries. The total salary expenditure for the 1987-88 fiscal year was $394,345.97. Total authorized two year operating budget for fiscal years 1986-88, $639,500. During the second fiscal year of the two year budget period the total amount encumbered or expended was $591,847 which is approximately 92% of the second year allocation.

Development and Planning

Private development activity is continuing to increase over the previous years, which at the time was considered a high level of development. The quantity of new commercial development shows a significant increase over recent years with residential development in the midst of constructing the near record quantity of subdivision lots recorded in fiscal year 1986-87. The estimated total cost of public improvements, due to new subdivisions recorded in the 1987-88 fiscal year nears one million dollars. The estimated total cost

of public improvements, due to other development in the 1987-88 fiscal years totals over 1.05 million dollars.

This division continues to be responsible for Public Works requirements, research and preparation of Subdivision Reports, General Plan amendments, Zoning Actions, Use Permits, Environmental Clearance Applications, Variance Permits, Building Site Reports, Drainage, Grading Plans, Plan Checking Public Improvement Plans and Final Maps, Subdivision Agreements, Easements, Advance Planning Issues, Engineering Forms, Check Lists, and the graphic portion of the Annual Report.

Additional development projects reviewed by this division over the past fiscal year includes:

1. Engel & Gray E.I.R.
2. C.B.S. Reuse of Facilities E.I.R.
3. Williams Bros. E.I.R.
4. North County Facilities E.I.R.

Private development and subdivision activity shown on Figure 8 include:

1.	General Plan Amendments	3
2.	Zone Change and Planned Development Permits	36
3.	Use Permits	18
4.	Environmental Clearance	29
5.	Variance	2
6.	Building Site Reports	154
7.	Grading Plans	25

8.	Lot Line Adjustments	14
9.	Reimbursement Maps/Agreements	2
10.	Subdivision Committee Reports	18
11.	Public Improvement Plans Reviewed	25
12.	Subdivisions Recorded:	14
	New Lots: Residential	87
	Commercial	10
	Industrial	4

As recorded by this office, rainfall for the 1987-88 season was 11.91 inches which is below the 20 year average of 13.09 inches for the city.

Capital Improvement

Engineering projects shown on Table 1 include projects that were completely designed within the 1987-88 fiscal year. These projects had a set of plans and specifications, and estimates prepared or reviewed by this division. There were 17 projects prepared within this fiscal year having a total value of $5,100,000. This is the largest number of projects prepared by this division in this decade.

Noteworthy projects during this year were the reconstruction of portions of Cook and School Streets, street maintenance project, water line project, demolish structures within the Westside Redevelopment Area and construct the improvements for Town Center West. The Town Center West project was the most challenging project encountered within this fiscal year. This Redevelopment Project required the relocation of utilities, construction of a storm drain system, parking lots, area lighting, new roadways, street lighting, sidewalks,

curbs and gutters, signal lighting systems, landscaping and various architectural features.

Also provided is technical support to other departments and divisions. Legislation required that the following studies be prepared under the direction of this division.

Report	Division
Urban Water Management Plan	Water
Salt Study Update	Wastewater
Solid Waste Assessment Testing at Sanitary Landfill; Water	Solid Waste
Solid Waste Assessment Testing at Sanitary Landfill; Air	Solid Waste

Construction Management

Projects constructed during the reporting period are shown on Table 2. These projects were inspected and the contracts administered during the 1987-88 fiscal year.

Noteworthy projects constructed during this year include the Renovation of the Electrical and Heating Systems at the Veterans Memorial Building, Street Maintenance Project 1987, School Playfield Renovations and the Secondary Trickling Filter Rehabilitation.

The development activity over the year affects the workload of this section as all work in public rights-of-way require a permit and inspection. Total amount collected for street encroachment permits for the fiscal year

1987-88 amounted to $18,736. Total permits issued by the Public Works Department were 242. Standard Specifications and Drawings, Contract Plans and Specifications, and miscellaneous revenue was $2,443.

The Standard Specifications and Drawings are available through this office. The updating and revision of these items is an ongoing process and reflects the charges in the construction industry.

Various contracts which are part of the Westside Redevelopment Project increased the workload of this section during the fiscal year. The contracts for demolition, pad preparation and utility installation were all a part of the preliminary work involved in preparing the development site. This section coordinated the work between redevelopment contractors, private contractors and utility contractors.

Traffic and Transit

Traffic and Transit activity shown on Figure 8 includes the staff work for the Traffic Committee, developments, design, Santa Maria Area Transit, and transportation planning.

The Traffic Committee work consists of traffic engineering studies involving traffic counts, speed surveys, accident records and related research and drafting. The Transportation & Planning Engineer acts as the staff person for the committee and conducts the monthly meetings along with preparing the agenda/minutes, correspondence, memoranda, resolutions, report to the City Administrator, and meeting with the public. The engineering staff is also required to report on claims against the city involving traffic control devices and street and intersection design. Traffic committee activity included:

1. Curb zone and parking investigations.....21

2. Intersection studies.....31

3. Miscellaneous traffic controls.....14

4. Developments and building sites.....8

5. Annual traffic count summary

Private developments which are estimated to generate significant new trips are required to conduct traffic and circulation studies. The reports include, among other things, the existing, new and cumulative traffic projections along with mitigation measures where the levels of service need improving. Several reports were completed for the major corridors of Blosser Road, Betteravia Road and Stowell Road. Others were completed for collectors such as Railroad and Taylor Streets.

The Community Development Department has contracted with Michael Brandman and DKS Associates to update the Circulation and Land Use Elements of the General Plan. This division is assisting the consultants as required. The new Circulation Plan will provide, among other things, the direction for establishing traffic impact fees for new developments. The fees along with participation by local agencies and State funds can eventually construct the needed improvements projected.

The Engineering Division continued to provide the administrative and management functions for Santa Maria Area Transit. The annual report for the transit service system has been included in this report for the reader's benefit.

SANTA MARIA AREA TRANSIT

QUARTERLY AND ANNUAL OPERATIONS REPORT

FOURTH QUARTER & FISCAL YEAR 1987-88

PREPARED FOR

SANTA MARIA

CITY COUNCIL

Prepared by:

Engineering Division of the

Public Works Department

and

Santa Maria Organization of

Transportation Helpers

SUMMARY

Ridership, Revenue and Expenditures

Fixed Route/Orcutt Shuttle

The fixed route system's fare box ratio and ridership continued to improve significantly during the last quarter of the year. The fourth quarter statistics show that the system achieved a fare box ratio of 19%. The fare box ratio improvements for the last six months of operation increased the year ending ratio to 15%. The previous year ended with fare box ratio of 12.3%. Ridership increased from 118,331 from the previous year to 136,572 for this year.

Based on the experience of the last six months it is the staffs opinion that a fare box ratio of 20% or more can be achieved for the next fiscal year. There is, however, still room for improving the system. Staff will continue to monitor routes that are not meeting the expected passenger productivity; review and adjust the amount of service as necessary, continue to reduce operating costs, increase marketing efforts, and purchase vehicles and bus stop facilities to accommodate the passenger demands of each individual route.

Demand Response/Elderly and Handicapped

This service had several operational changes during the last fiscal year. They included an additional bus and a modest fare increase. The fare increase was initiated on April 1, 1988 but the extra revenue was not enough to meet the required 10% fare box ratio for the fiscal year. The service ended the fourth quarter and fiscal year with the same ratio of 8%. Ridership did increase from 11,876 from the previous year to 15,698 for the current year.

The engineering division along with the SMOOTH staff is currently reviewing methods to reduce operating costs and still maintain the level of service required for the frail and elderly A report will soon be submitted to the City Administrator's office outlining various options and recommendations.

Special Health Service

This service, which provides transportation to medical facilities in the Santa Barbara area, continues to operate in a satisfactory manner. The participating agencies of Santa Maria, Guadalupe, Lompoc and the County have agreed to continue the service and are providing their share of costs.

The fare box ratio for the fourth quarter was 19% and for the year ending June 30, 1988 was 18%. The ridership was 209 for the fourth quarter and 1,477 for the year. The requirement of a 10% fare box ratio was met for the year ending June 30, 1988.

Contractor Activities

Santa Maria Organization of Transportation Helpers (SMOOTH), who was awarded the new SMAT contract, began to operate under the terms of the contract requirements on January 1, 1988. The contract, besides the day to day operations of the transit system, requires monthly reports on operation statistics; employees; and marketing. SMOOTH has complied with the contract requirements and the engineering division has found the reports to be satisfactory. The marketing area was given top priority and SMOOTH has been very active in preparing a plan. SMOOTH has also continued their marketing efforts in the area of advertising, route map distribution, coupon mailings, bus advertising, bench advertising program. Through the advertising revenues SMOOTH has also purchased 20 additional benches. The spanish speaking community has also been the target of advertising.

Staff Activities

The engineering division, as contract administrator, oversees the SMAT operations. With assistance from the Finance Department, the engineering division is also responsible for the preparing the operating and capital budget of the SMAT system. Funding for the SMAT system is received from State and Federal revenues. Agreements were prepared for the agencies of the Santa Barbara County, City of Guadalupe and City of Lompoc to finance their portions of SMAT services provided by the City. There are currently two capital projects in the process of being completed. They include the purchase of two busses and construction of bus turn outs along Broadway. The engineering staff also participated in preparing transit reports; federal reports and planning activities.

System Operations

The day to day operations of the SMAT system continued to operate in a satisfactory manner. Interruption of service was very minimal due to defective equipment. There were only three reported accidents involving SMAT vehicles during the past year. The accidents were minor and there were no reported injuries. Complaints and requests involved operational procedures and were handled mostly by the SMOOTH staff. During the last months of the fiscal year SMOOTH reported increasing incidents of a bus being full and leaving persons behind. This problem is being reviewed by staff and SMOOTH for a possible solution.

TRANSIT SYSTEM ACTIVITIES

Ridership, Revenue and Expenditures

Fixed Route/Orcutt Shuttle

Ridership

The attached exhibits "A" and "B" show the statistics and performance for the fourth quarter and ending fiscal year. It should be noted that the revised fixed route system was started on September 21, 1987 and the new SMAT contract on January 1, 1988. The statistics and performance indicators, which showed a significant improvement for the ending fiscal year, do not reflect a full year of the revised system. The ridership, based on past records, was the highest for the fixed route system. Exhibit "F" shows the number of passengers for each of the fixed routes. The graph indicates 10,366 passengers for the month of January, 1988 and 14,080 for the month of June, 1988. This is an increase of 36% comparing the two months. June is also the highest recorded monthly passenger count. Although the total fixed route system is operating very well the passenger counts for the individual routes (Exhibit "F") shows that Route 3 has not been very productive. Staff will be reviewing various options available to improve this and the other routes.
The year to date ridership was 136,572 compared to the previous year of 118,331.

Revenue

The fixed route fare revenues have kept pace with the increase of passengers and the fourth quarter posted $19,804. This compares with a third quarter revenue of $16,506. The year ended with $67,987 and compares with the previous year revenue of $64,647.

Demand Response/Elderly Handicapped

Ridership

Ridership for the fourth quarter was 4,640 and the year ended with 15,698. The third quarter was 4,476 and the previous year had a total of 11,876.

Revenue

As expected, the demand response service showed an increase of fare revenue for the fourth quarter over the third quarter. Demand response posted $3,002 for the fourth quarter and the year ended with $10,211. The third quarter had $2,123 and the previous year ended with $8,630.

The lower than expected fare revenue can be attributed to extra attention required for the frail and elderly and consuming more

time. As mentioned in past reports, the extra bus was needed to meet the growing demand for this service. As the urban area population grows, more programs and services for the elderly and handicapped are being provided by the City and County. It may be noted that the three SMAT buses, which are scheduled for every service hour, cover the entire Santa Maria/Orcutt area and service Guadalupe twice a week.

Special Health Service

Ridership/Revenue

The special health service bus that goes to Santa Barbara twice a week continues to operate in the same satisfactory manner year after year. Ridership and revenues are essentially the same every year. Ridership is about 1500 annually and generates approximately $4,600 in revenue. Agreements with the participating agencies of the County, Guadalupe and Lompoc were approved through the funding disbursed by the Area Planning Council.

Total Transit System Expenditures

The year end accounting of the system is as follows:

Item	* F. R./ S.	D. R.	H. S.	Total
SMOOTH	357,040	101,046	18,047	476,132
Insurance	31,084	7,252	2,941	41,278
Fuel	33,023	8,437	3,021	44,482
Veh. Maint.	49,865	12,778	3,873	66,517
Sign Maint.	4,923	0	0	4,923
City Adm.	8,086	3,099	600	11,786
Total	$484,024	$132,614	$28,482	$645,120
Fares	$ 67,987	$ 10,211	$ 4,618	$ 82,816
86-87 Expenditures				
Total	$524,166	$ 87,984	$25,008	$637,158
Fares	$ 64,647	$ 8,630	$ 5,569	$ 78,846

* See Exhibit "H"

CONTRACTOR ACTIVITIES

Contractor Operations

On January 1, 1988, SMOOTH started reporting their operating activities as required under their new SMAT contract. Reports are submitted on a monthly basis regarding employee training, turnovers, evaluations and driver license checks. A summary of marketing and public relations activities are also reported for each month.

The SMOOTH staff at the end of June, 1988 included 2 supervisors, 3 dispatchers, 22 bus drivers, 1 bus porter, 1 clerk-typist, and 1 bookkeeper. During the last six months there were 7 terminations and 8 new hires. There were approximately 272 training hours for new employees along with on-going training of two hours for each employee every month. Evaluations, driver licence and traffic citation checks were made for each employee on January, 1988 and for each new employee thereafter. All employees were satisfactory .

Marketing

A summary of major marketing activities include the following:

* Hired a professional firm to prepare a marketing plan as recommended in the Crain Study.
* Hired a temporary person to work on marketing surveys and programs. This person is a student working on her MBA degree in marketing.
* Installed route maps at four locations for each fixed route.
* Had 25,000 bus schedules printed and distributed
* Sold advertising signs for 34 benches. Revenue from these signs will be used for marketing.
* Using marketing funds, 20 benches were purchased.
* Started advertising in the spanish news media, as recommended in the Crain Study.
* Working with the County in program for reduced fares for low income families.
* Participated in several coupon mailings for advertising.
* Continued advertising in newspapers.
* Continued advertising on buses under barter agreements.
* Started negotiations with professional firm for advertising jingle.

SMOOTH continued with their public relations program which includes attending monthly meetings of social and club organizations, public agencies, and other relevant councils and associations.

STAFF ACTIVITIES

The engineering division has prepared and submitted funding assistance applications to UMTA for SMAT operations and capital expenditures. Approval of $224,454 is pending for the 1987-88 fiscal year. The local share of approximately $295,680 is from Transportation Development Act funds which were disbursed by the Area Planning Council (APC). The share of the SMAT funding required from Santa Barbara County, Guadalupe and Lompoc is also distributed by the APC. In meeting the requirements for federal assistance, this department has prepared numerous reports and has had several public hearings. Submittal of these requirements must be made in a timely and correct manner since the federal funds can be held back.

There are currently two capital projects in the process for completion by the end of the year. One is the bus turns along Broadway and the other is the purchase of two replacement buses.

This department and SMOOTH assisted the APC staff in preparing background information for various reports. These include, among other things, the Transportation Improvement Plan, and information for UMTA.

The TDA applications for the 1988-89 fiscal year has been submitted to APC and is pending approval. There are no service changes proposed in the 88-89 SMAT budget.

With the new SMAT contract and fixed route revisions the results can be described as very effective and a major turn around from one year ago. It was the goal of the engineering division to end the SMAT 87-88 fiscal year with a fare box ratio of 15% or more. The State has established fare box ratio regulations for agencies exempt from the required 20% minimum. Santa Maria is eligible for this fare box ratio exemption that can be approved between 15% and 20% by the Area Planning Council.

The successful completion of the first six months, under the new contract and modified system, can be attributed to the "SMAT Operations and Marketing Study" by Crain and Associates; the APC, County, and City staffs efforts on getting public support of the Study recommendations; approval by the City Council to proceed; the cooperation and efforts by SMOOTH on implementing the Study recommendations; and some "fine tuning" revisions requested by transit users and subsequently approved.

SYSTEM OPERATIONS

Bus Maintenance

Preventative maintenance of the SMAT vehicles was performed by the Public Works Mechanical Division. Major work on engines or transmissions is usually sent out to private businesses if time and manpower is not available in house. The mechanical division also does the maintenance on the wheel chair lifts and responds to road calls. Other than routine work and minor fender benders there was no major interruption of service by the lack of buses. Attached for your information is the current inventory of SMAT vehicles (Exhibit "E"). Please note that the two high mileage vehicles, #164 & #167, will be replaced with a contract going out the month of August, 1988. The minimum replacement criteria by UMTA is at least seven years service or an accumulation of at least 200,000 miles for the Escorts and Champions. The Dodge Wide Ones (vans) must have at least four years of service or an accumulation of at least 100,000 miles.

Service delays/missed trips

SMOOTH has provided a monthly list of missed trips and service delays for the last six months of the fiscal year. During this period there were only 4 missed trips. A missed trip is when one-half or more of a fixed route is not serviced. A review of these indicated the causes were related to defective equipment. A service delay is defined as a delay for 10 minutes or more for the fixed route and 15 minutes for the demand response service. A review of the service delays indicates an average of 30 delays per month with an average of 12 minutes. All the delays were in the fixed routes with the exception of one or two per month in the demand response service. In a typical month of 1,400 service hours the average delay is 0.4% of the total time for the fixed route service.

Accidents

There were 3 reported accidents involving SMAT vehicles during the fiscal year. All the accidents involved minor body damage to the vehicles and no injuries to passengers. There was, however, a deer hit by a bus on the way to Santa Barbara. The damage to the bus and deer were minor and they both went on their own way.

Requests/Complaints

There were several operations problems reviewed during the past fiscal year. Some involved new policy procedures for dress codes and the assistance to passengers loading for baby strollers. There were fixed route revisions initiated on November, 1987 at the request of transit users and the City Council. Adjustments were also made for new bus stops at various locations.

A review of requests and complaints indicates mostly operation procedures with only routine follow up required by the SMOOTH staff. SMOOTH has reported that in June, 1988 there were 7 occasions when the vehicle was full and left persons behind at bus stop. This department and SMOOTH staff will be reviewing this matter and try to accommodate persons left at bus stops. This is occurring mostly on the heavily used Route 1.

Attachments:

Exhibit	*"A"*	*Year to date Stats*
Exhibit	*"B"*	*Fourth Quarter Stats*
Exhibit	*"C"*	*Comparison of 86-87 & 87-88 Stats*
Exhibit	*"D"*	*" " " " " " "*
Exhibit	*"E"*	*Bus Fleet Inventory*
Exhibit	*"F"*	*Passengers by Route*
Exhibit	*"G"*	*Fixed Route Ridership*
Exhibit	*"H"*	*Fixed Rt. Expenditures*

reprt788.smt

EXHIBIT "A"

SMAT OPERATION STATISTICS AND PERFORMANCE
87/88 FISCAL YEAR
YEAR TO DATE 6/30/88

	FIXED ROUTE	DEMAND RESPONSE
VEHICLE SERVICE MILES	259,004	66,674
PASSENGERS	136,572	15,698
SERVICE HOURS	17,441	5,590
FARES	$ 67,987	$ 10,211
NET OPERATING COST	$ 452,939	$125,361
RATIO - FARE BOX TO OPERATING COST	15%	8%
OPERATING COST PER PASSENGER	$ 3.32	$ 7.99
OPERATING COST PER MILE	$ 1.75	$ 1.88
OPERATING COST PER SERV. HR.	$ 25.97	$ 22.43
PASSENGERS PER SERV. HOUR	7.8	2.8

****

SPECIAL HEALTH SERVICE	
SERVICE HOURS	934
SERVICE MILES	20,424
PASSENGERS	1,477
FARES	$ 4,618
NET OPERATING COST	$ 25,541
RATIO - FARE BOX REVENUE TO OPERATING COST	18 %

STATS6.SMT

EXHIBIT "B"

SMAT OPERATION STATISTICS AND PERFORMANCE
87/88 FISCAL YEAR

FOURTH QUARTER

	FIXED ROUTE	DEMAND RESPONSE
VEHICLE SERVICE MILES	58,449	15,616
PASSENGERS	40,563	4,640
SERVICE HOURS	4,134	1,536
FARES	$ 19,805	$ 3,002
NET OPERATING COST	$ 103,391	$ 35,772
RATIO - FARE BOX TO OPERATING COST	19%	8%
OPERATING COST PER PASSENGER	$ 2.55	$ 7.71
OPERATING COST PER MILE	$ 1.77	$ 2.29
OPERATING COST PER SERV. HR.	$ 25.00	$ 23.29
PASSENGERS PER SERV. HOUR	9.8	3.0

****

SPECIAL HEALTH SERVICE

SERVICE HOURS	234
SERVICE MILES	4,808
PASSENGERS	209
FARES	$ 1,604
NET OPERATING COST	$ 8,345
RATIO - FARE BOX TO OPERATING COST	19%

EXHIBIT "C"

SANTA MARIA AREA TRANSIT

COMPARISON OF YEAR ENDING STATISTICS

FOR 86-87 & 87-88 FISCAL YEARS

FIXED ROUTE SYSTEM

	1987	1988	% CHANGE
NUMBER OF PASSENGERS	118,331	136,572	+15%
VEHICLE SERVICE MILES	372,274	259,004	-44%
VEHICLE SERVICE HOURS	20,944	17,441	-20%
FARES	$64,647	$67,987	+05%

FISCAL YEAR 1987 WAS THE "OLD" SYSTEM

EXHIBIT "D"

SANTA MARIA AREA TRANSIT

COMPARISON OF FOURTH QUARTER STATISTICS

FOR 86-87 & 87-88 FISCAL YEARS

FIXED ROUTE SYSTEM

	1987	1988	% CHANGE
NUMBER OF PASSENGERS	31,315	40,563	+30%
VEHICLE SERVICE MILES	93,672	58,449	-60%
VEHICLE SERVICE HOURS	5,254	4,134	-27%
FARES	$16,509	$19,805	+20%

THE FOURTH QUARTER OF 1987 WAS THE "OLD" SYSTEM

SMAT BUS FLEET INVENTORY DATE 6/15/88

VEHICLE NUMBER	LICENSE NUMBER	YEAR & MAKE	NUMBER OF SEATS	WHEEL CHAIR POSITIONS	MILEAGE	M.P.G.	DATE PUT IN SERVICE	REPLACEMENT YEAR	VIN NUMBER
160	077447	1987 CHAMPION	17	2	24,384	9.05	11/87		1FDKE3010HHB72574
161	077404	1987 CHAMPION	17	2	31,558	7.90	10/87		1FDKE3016HHB72577
162	077420	1987 CHAMPION	19	1	22,695	9.56	11/87		1FDKE3014HHB72576
163	469951	1985 ESCORT II	14	1	128,849	6.39	3/85		1FDKE30L7FHB03881
164	792759	1982 WIDE ONE	12	2	171,062	7.64	6/82		256KB33U0CK122643
165	469970	1985 ESCORT II	14	1	134,110	5.66	3/85		1FDKE30L6FHB03890
166	772501	1981 WIDE ONE	9	4	260,822	7.40	7/81		257KB33T4BK229048
167	077403	1987 CHAMPION	19	1	28,370	8.67	9/97		1FDKE3012HHB72575
168	469950	1985 ESCORT II	14	1	130,238	4.79	3/85		1FDKE30L9FHB03896
169	469949	1985 ESCORT II	14	2	126,629	6.55	3/85		1FDKE30L4FHB03885
170	469974	1985 ESCORT II	14	2	124,614	4.99	3/85		1FDLE30L2FHB03884

EXHIBIT "E"

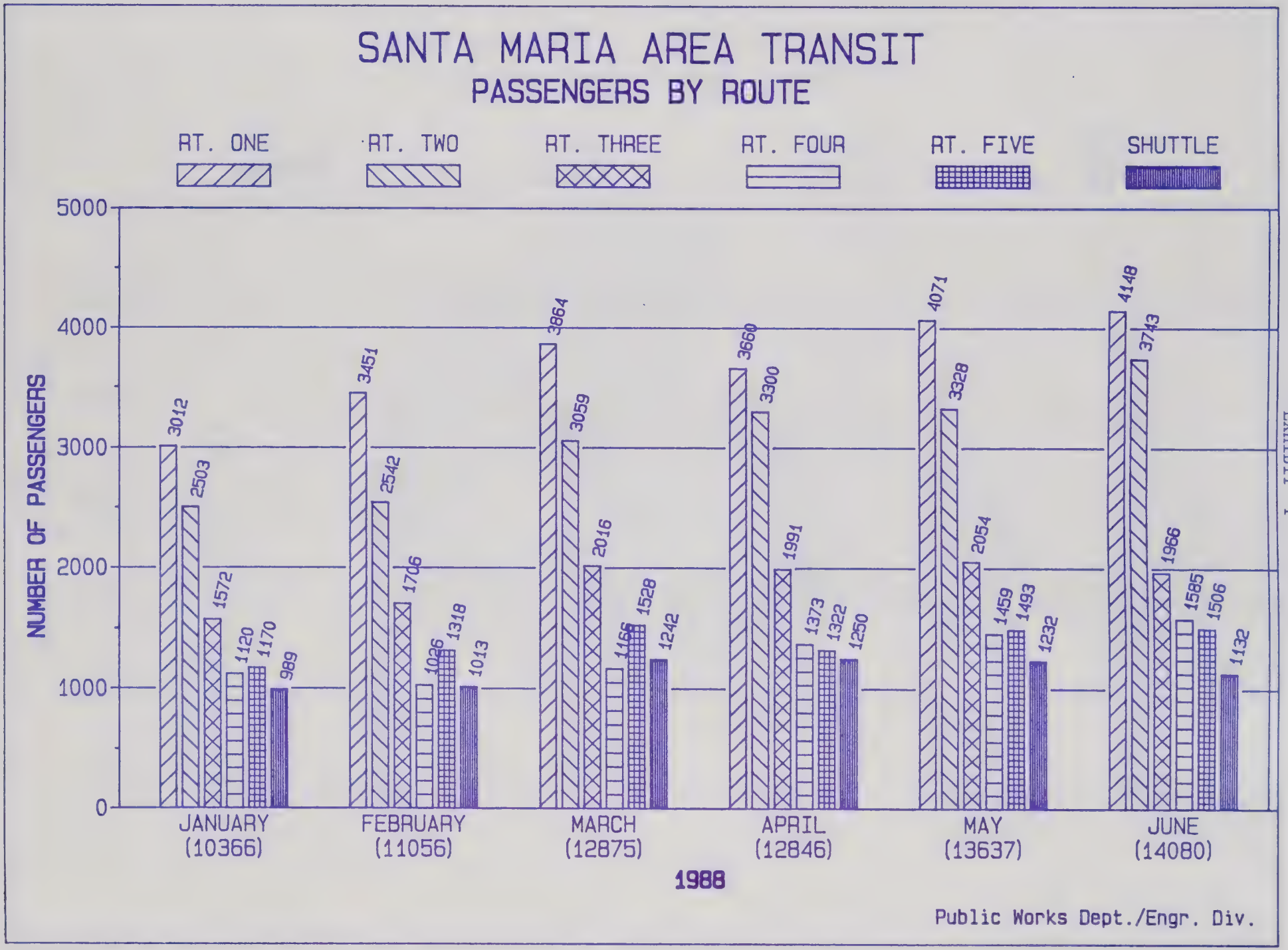
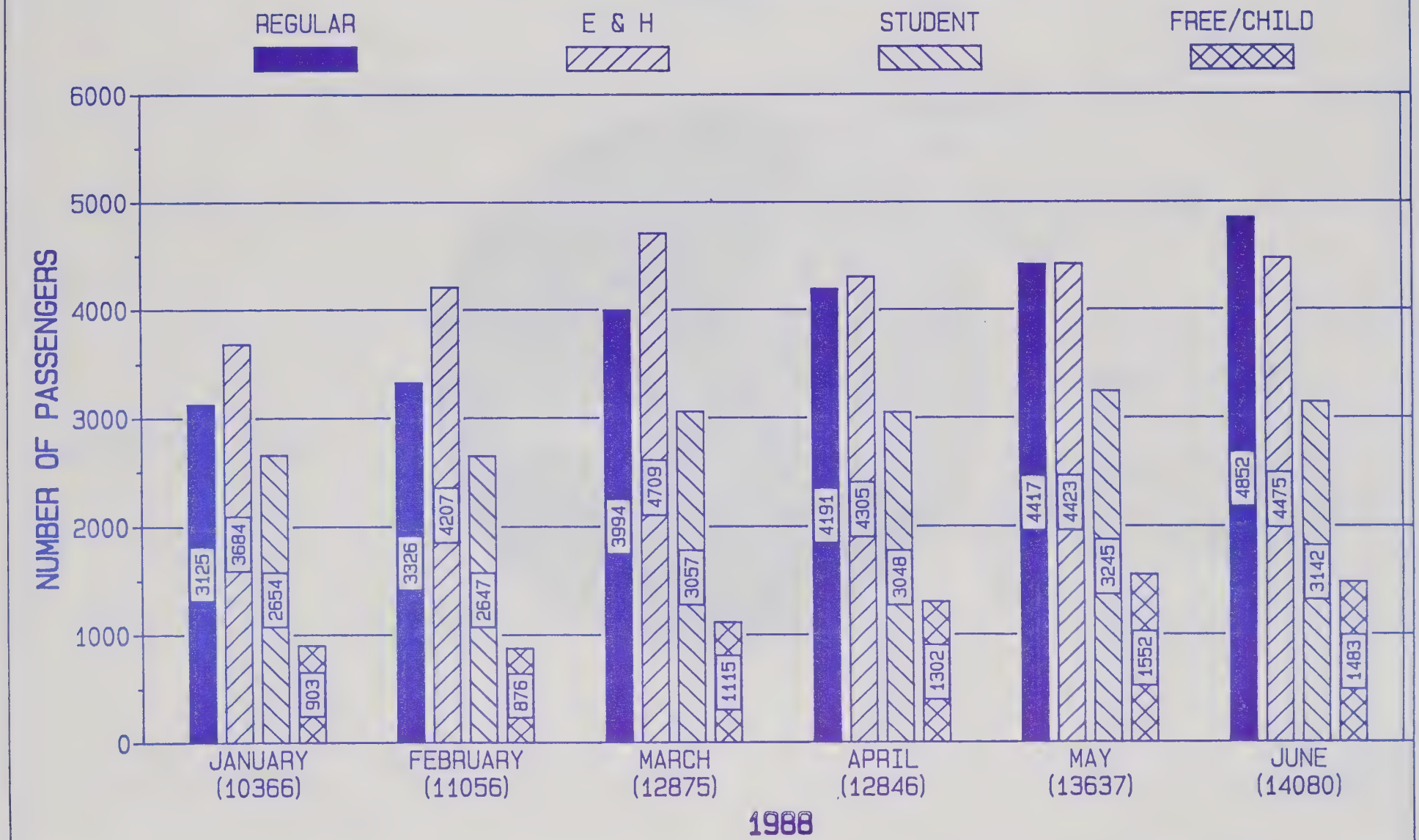

SANTA MARIA AREA TRANSIT
PASSENGERS BY ROUTE
RT. ONE
RT. TWO
RT. THREE
RT. FOUR
RT. FIVE
SHUTTLE
NUMBER OF PASSENGERS
5000
4000
3000
2000
1000
0
3012
2503
1572
1120
1170
989
3451
2542
1706
1026
1318
1013
3864
3059
2016
1166
1528
1242
3660
3300
1991
1373
1322
1250
4071
3328
2054
1459
1493
1232
4148
3743
1966
1585
1506
1132
JANUARY
(10366)
FEBRUARY
(11056)
MARCH
(12875)
APRIL
(12846)
MAY
(13637)
JUNE
(14080)
1988
Public Works Dept./Engr. Div.

EXHIBIT "F"

SANTA MARIA AREA TRANSIT

FIXED ROUTE RIDERSHIP



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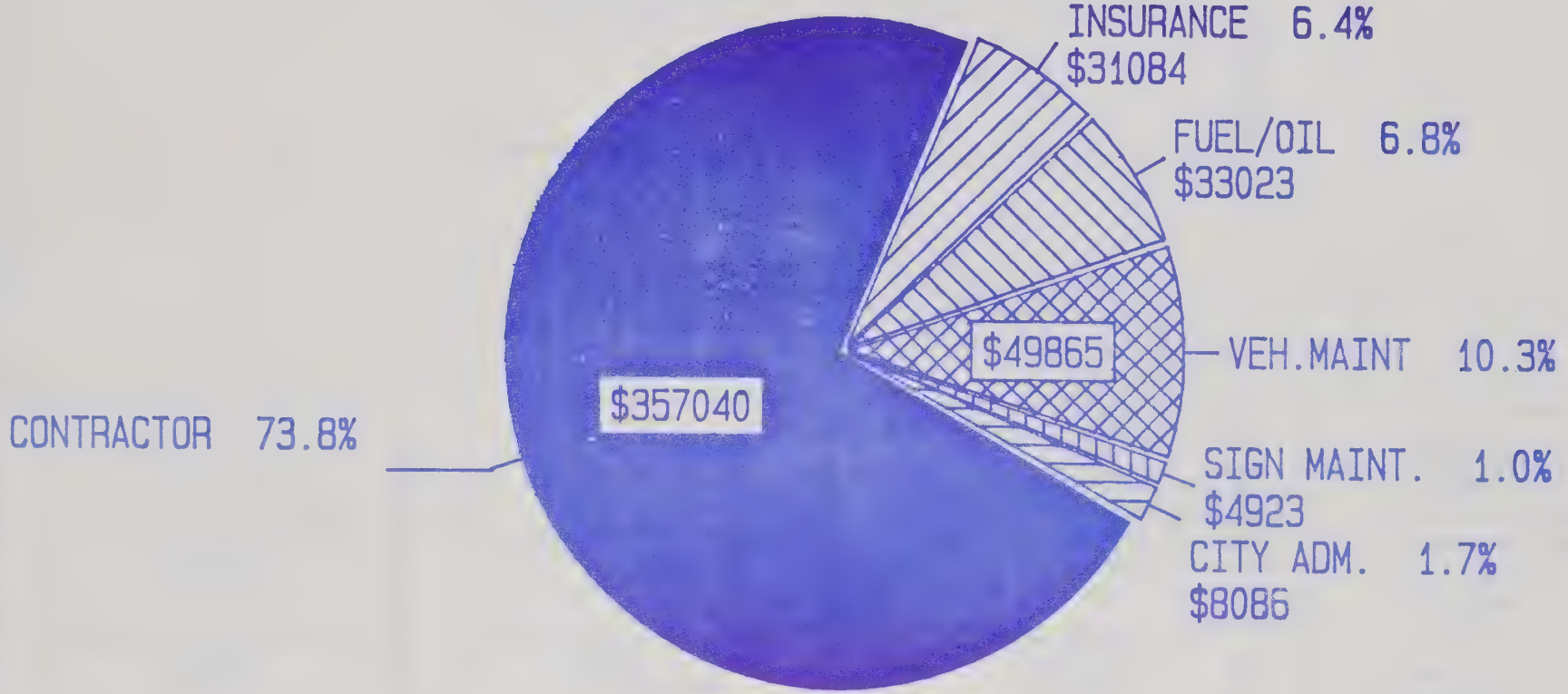
SANTA MARIA AREA TRANSIT
FIXED ROUTE/SHUTTLE EXPENDITURES
1988-87



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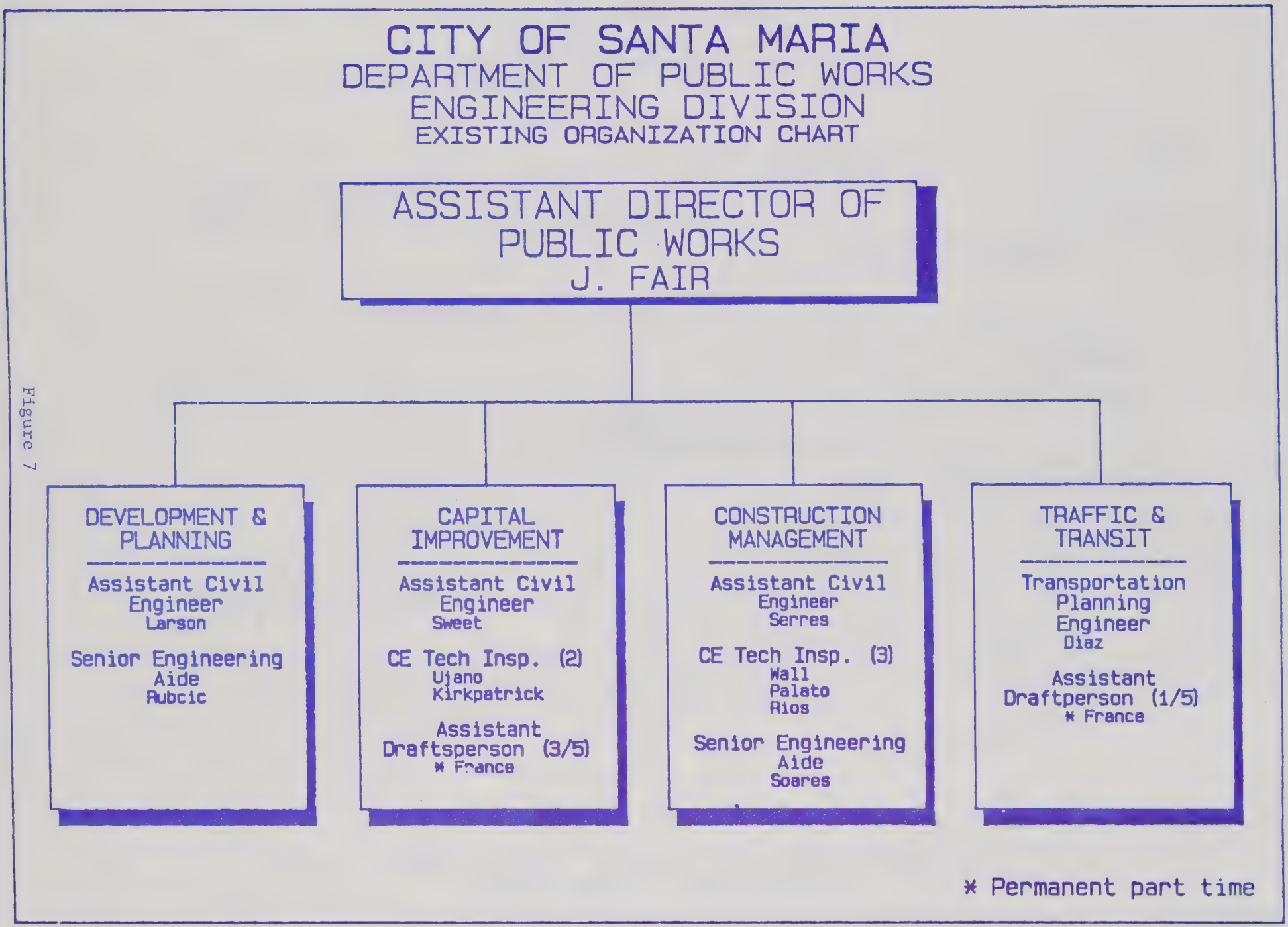
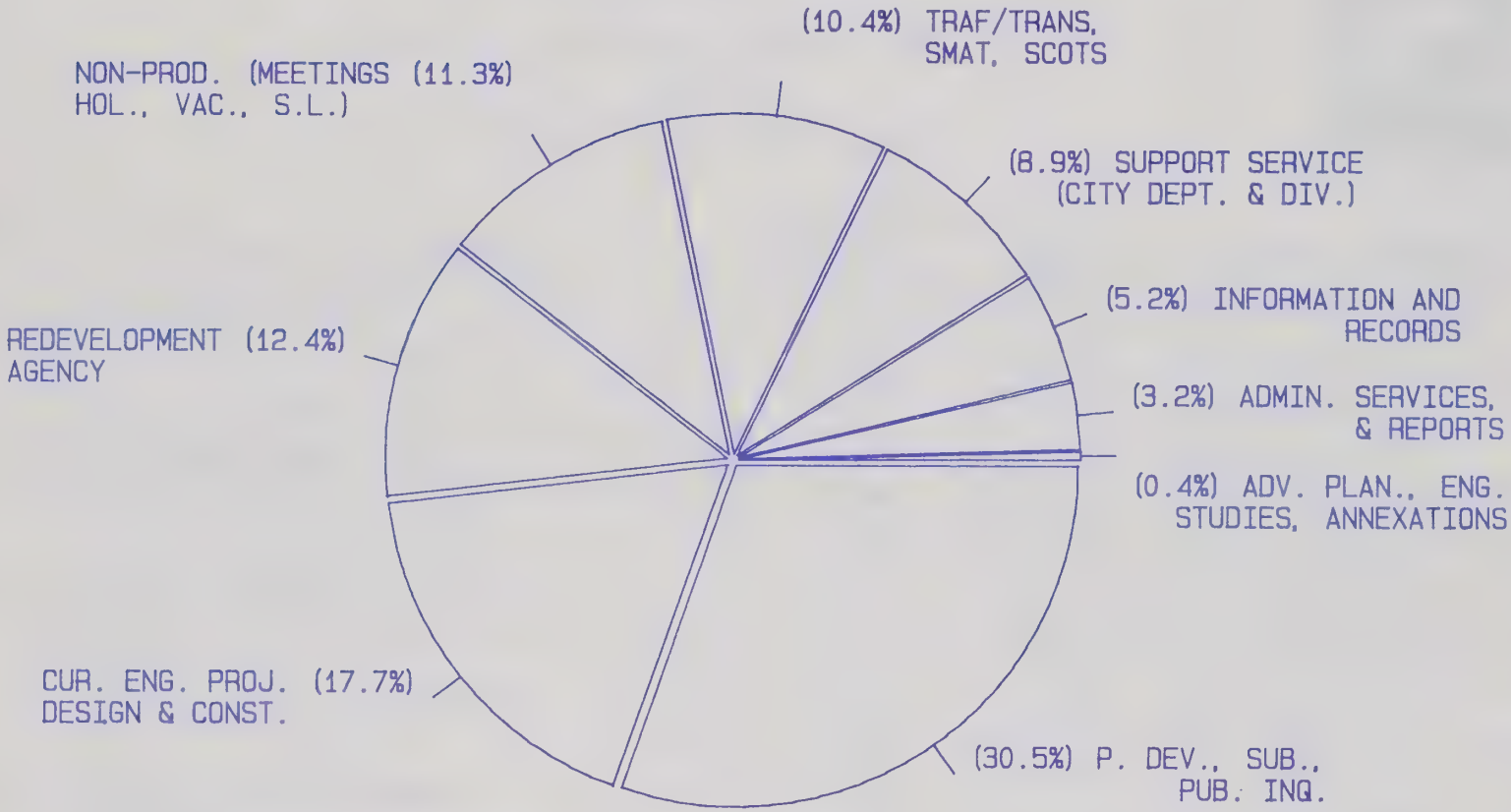

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
EXISTING ORGANIZATION CHART
ASSISTANT DIRECTOR OF PUBLIC WORKS
J. FAIR
DEVELOPMENT & PLANNING
Assistant Civil Engineer
Larson
Senior Engineering Aide
Rubcic
CAPITAL IMPROVEMENT
Assistant Civil Engineer
Sweet
CE Tech Insp. (2)
Ujano
Kirkpatrick
Assistant Draftsperson (3/5)
* France
CONSTRUCTION MANAGEMENT
Assistant Civil Engineer
Serres
CE Tech Insp. (3)
Wall
Palato
Rios
Senior Engineering Aide
Soares
TRAFFIC & TRANSIT
Transportation Planning Engineer
Diaz
Assistant Draftperson (1/5)
* France
* Permanent part time

Figure 7

CITY OF SANTA MARIA

Engineering Division
Staff hour Assignments 1987-88


(10.4%) TRAF/TRANS, SMAT, SCOTS
(8.9%) SUPPORT SERVICE (CITY DEPT. & DIV.)
(5.2%) INFORMATION AND RECORDS
(3.2%) ADMIN. SERVICES, & REPORTS
(0.4%) ADV. PLAN., ENG. STUDIES, ANNEXATIONS
(30.5%) P. DEV., SUB., PUB. INQ.
CUR. ENG. PROJ. (17.7%) DESIGN & CONST.
REDEVELOPMENT (12.4%) AGENCY
NON-PROD. (MEETINGS (11.3%) HOL., VAC., S.L.)

TOTAL SALARIES: Regular Salaries, Overtime and Part Time
1987-88 TOTAL: $394,345.97

Figure 8

ARENGSHA

ENGINEERING DIVISION

CAPITAL IMPROVEMENT SECTION

TABLE 1

PROJECTS DESIGNED

BID NO.	PROJECT DESCRIPTION	ENGINEER'S ESTIMATE	CALL FOR BIDS	DESIGN ENGINEER
88/1	STREET MAINTENANCE – 1987	$ 761,000	07/07/87	CITY OF SANTA MARIA
88/2	SLURRY SEAL TOWN CENTER PARKING LOT	29,000	07/07/87	CITY OF SANTA MARIA
88/3	CHEMICAL WEED ABATEMENT 1987–88	26,000	11/03/87	CITY OF SANTA MARIA
88/4	INSTALL FENCE @ 705 WEST CYPRESS	13,000	07/21/87	CITY OF SANTA MARIA
88/5	POLICE DEPT. PROPERTY ROOM ADDITION	100,000	09/01/87	ARCHITECTURAL ENTERPRISES
88/6	RESURFACE TENNIS COURTS @ ADAM PARK	10,000	09/01/87	CITY OF SANTA MARIA
88/7	CONSTRUCT MONITORING WELLS 4, 5, 6, 7, 8 @ THE CITY OF S.M LANDFILL	100,000	09/01/87	RICK HOFFMAN & ASSOC.
88/8	REHABILITATE WELL 9S	51,000	12/03/87	CITY OF SANTA MARIA
88/9	RENOVATE THE ELECTRICAL & HVAC SYSTEMS AT THE VETERANS MEMORIAL BUILDING	125,000	10/20/87	K. D. BRUMMEL & ASSOC.
88/10	FIBERGLASS PAUL NELSON POOL	55,000	10/20/87	CITY OF SANTA MARIA
88/11	UPGRADE HVAC SYSTEM AT COMMUNITY DEVELOPMENT	45,000	11/17/87	K. D. BRUMMEL & ASSOC.
88/12	WESTSIDE PROJECT, PHASE II SITE & BUILDING DEMOLITION	220,000	11/03/87	CITY OF SANTA MARIA
88/15	STREET RECONSTRUCTION – 1987	400,000	05/03/88	CITY OF SANTA MARIA
88/16	WATERLINE PROJECT – 1988	500,000	02/16/88	CITY OF SANTA MARIA
88/17	CONSTRUCT IMPROVEMENTS @ TOWN CENTER WEST	2,500,000	03/01/88	VARIOUS
88/18	RECARPET THE LIBRARY	45,000	04/19/88	CITY OF SANTA MARIA
88/19	LANDSCAPE MILLER STREET	120,000	04/19/88	LANDPLANS PLUS
	TOTAL	$5,100,000		

ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT SECTION

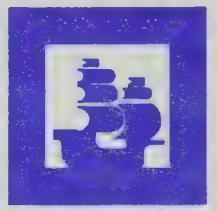


TABLE 2

PROJECTS CONSTRUCTED

BID #	PROJECT DESCRIPTION	FINAL CONST. COST	COUNCIL AWARD	COUNCIL ACCPT.	CONTRACTOR
87/1	SECONDARY TRICKLING FILTER REHABILITATION	$971,917	12/04/86	08/18/87	SPEISS CONSTRUCTION CO., INC.
87/2	CHEMICAL TREATMENT & TEST PUMPING WELL 11S	52,842	11/04/86	08/04/87	FLOYD V. WELLS, INC.
87/8	PHASE 1 SITE WORK PREP OF MERVYN'S PAD	155,175	04/21/87	06/21/87	A.J. DIANI CONSTRUCTION CO.
87/10	OVERHEAD DOORS AT FIRE STATION NO. 2	5,041	06/02/87	08/18/87	OVERHEAD DOOR COMPANY
87/11	VIDEO SEWER LINES	11,920	07/07/87	11/03/87	VIDEO INSPECTION SPECIALISTS
87/12	SCHOOL PLAYFIELD RENOVATIONS	282,286	07/07/87	11/19/87	KARLESKINT-CRUM, INC.
88/1	STREET MAINTENANCE 1987	566,406	08/18/87	01/19/88	M.J. HERMRECK
88/3	CHEMICAL WEED ABATEMENT 1987-88	20,020	12/15/87	05/03/88	ABATE-A-WEED OF SAN DIEGO
88/4	CHAIN LINK FENCE INSTALLATION @ 705 W. CYPRESS	12,712	09/15/87	01/19/88	FENCE FACTORY
88/6	RESURFACE TENNIS COURTS AT ADAM PARK	9,678	10/20/87	12/15/87	DAVID PAUL FOSTER CONSTRUCTION
88/7	CONSTRUCT MONITORING WELLS NO'S. 4,5,6,7 & 8	37,030	10/20/87	01/19/88	FLOYD V. WELLS INC.
88/8	REHABILITATE WELL 9-S	33,350	12/15/87	03/15/88	LAYNE-WESTERN CO. ILNC.
88/10	FIBERGLASS PAUL NELSON POOL	62,475	12/01/87	02/16/88	GLASS-COAT SYSTEMS, INC.
	TOTAL	$2,220,856			

MECHANICAL MAINTENANCE DIVISION

This Division is responsible for the management of the City's entire fleet of operations vehicles and other similar equipment. The mobile and stationary fleet has approximately 274 gasoline and diesel powered equipment of various sizes and types. The major portion consists of passenger vehicles and trucks, the remainder includes miscellaneous power equipment from lawn edgers to a Caterpillar D-8 bulldozer.

The maintenance program includes "in-house" minor and major engine repairs, tune-ups, general repairs, metal fabrication, minor body repairs, brake repairs, tire repairs, lubrication and an effective preventive maintenance program. An analysis is performed on each job to assure best overall economy and safety. This has resulted in operating the division with a minimum dollar budget. This division is unique in that it operates as a "pool" rental system for all the mechanical equipment used by all the departments and divisions and entails the development of the specifications for purchasing of same; keeps detailed records for equipment cost analysis and setting of the rental rates for vehicles as well as the City radio communication units.

During fiscal year 1987-88, fleet vehicles traveled 1,658,944 miles, a decrease of 4.1% from last year, using some 294,687 gallons of fuel, an increase of 0.8% from last year. Service fuel delivery tickets used during this period were 12,627.

The division used 2,867 shop repair orders. This is an increase of 128 from that used last year.

A budget balance is sustained through revenue from the Pool Rental Program and other reimbursements, as follows:

COMM. AND RENTAL	$ 81,456.00
a. Assigned and unassigned vehicles	$2,644,962.04
b. Private party accident insurance	1,032.85
c. Sale of surplus vehicles and equipment	55,574.11
d. Services provided to other agencies	43,105.37
Total	$2,826,130.37

Police patrol and Santa Maria Area Transit (SMAT) accounted for the greatest miles traveled during 1987-88 fiscal year. Police patrol operated 16 black and white units (includes K-9) for a total of 412,237 miles or an average of 2,147 miles per unit per month for the 12-month period.

SMAT operated eleven mini buses during the same period in providing door to door, fixed route and health services transportation compiling a total of 357,134 miles traveled for the year or an average of 2,706 miles per unit per month.

The fleet replacement program saw two significant changes during the fiscal year. Four 'diesel' powered mini buses were introduced to the SMAT fleet and in the Solid Waste Division six 'automated' sideloading refuse trucks replaced eleven residential refuse units.

Petroleum dealers are still optimistic that fuel supplies will remain stable; however, as in the past, fuel supply shortages may occur in the future. Therefore, this division will continue to seek fuel saving methods,

i.e., down size replacements where possible, encourage fuel saving driver's techniques (CAM 81-1) and investigate alternative fuels.

Figure 10 depicts man hours for the various segments of this division's work.

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
MECHANICAL MAINTENANCE DIVISION
EXISTING ORGANIZATION CHART

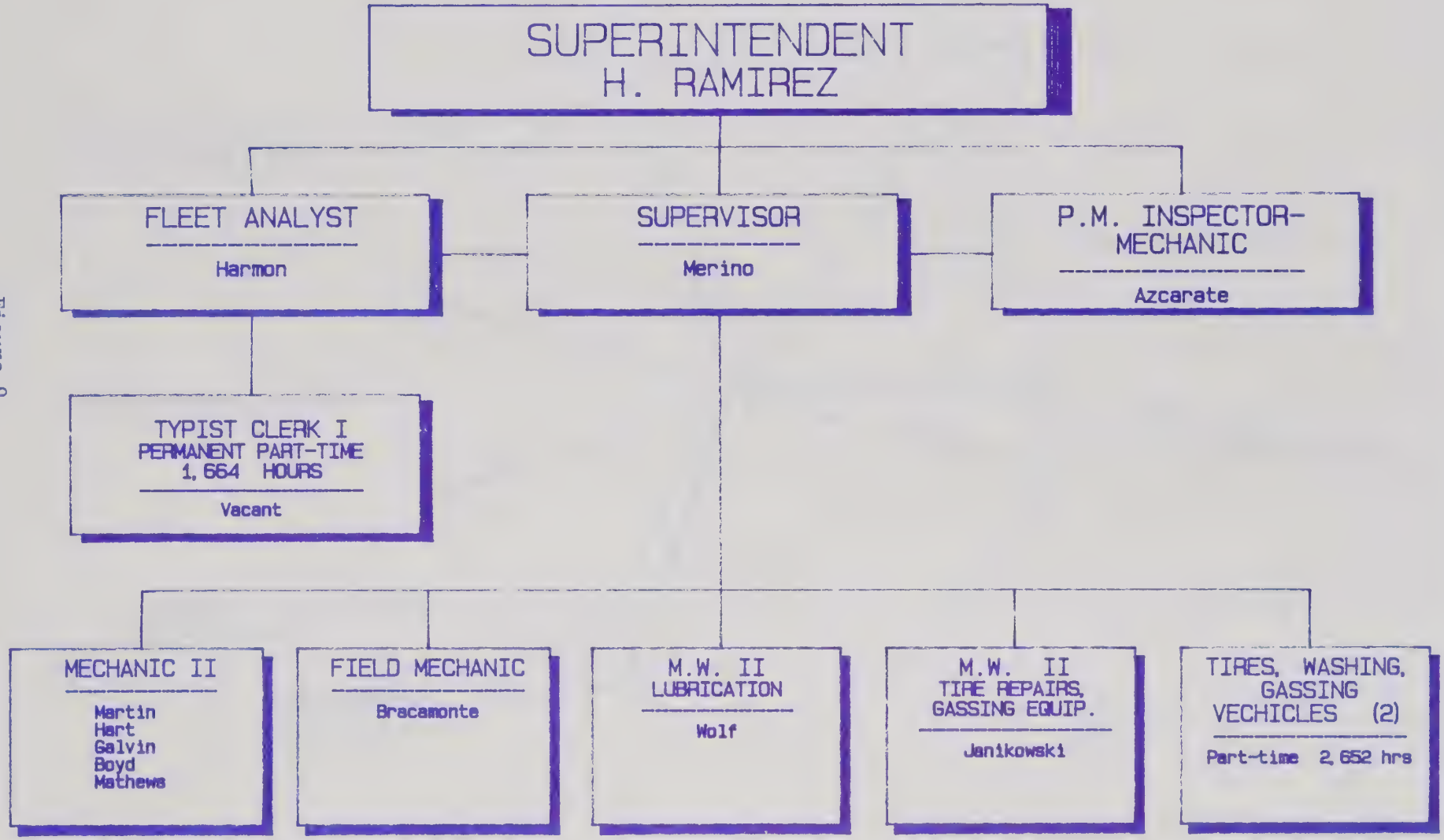


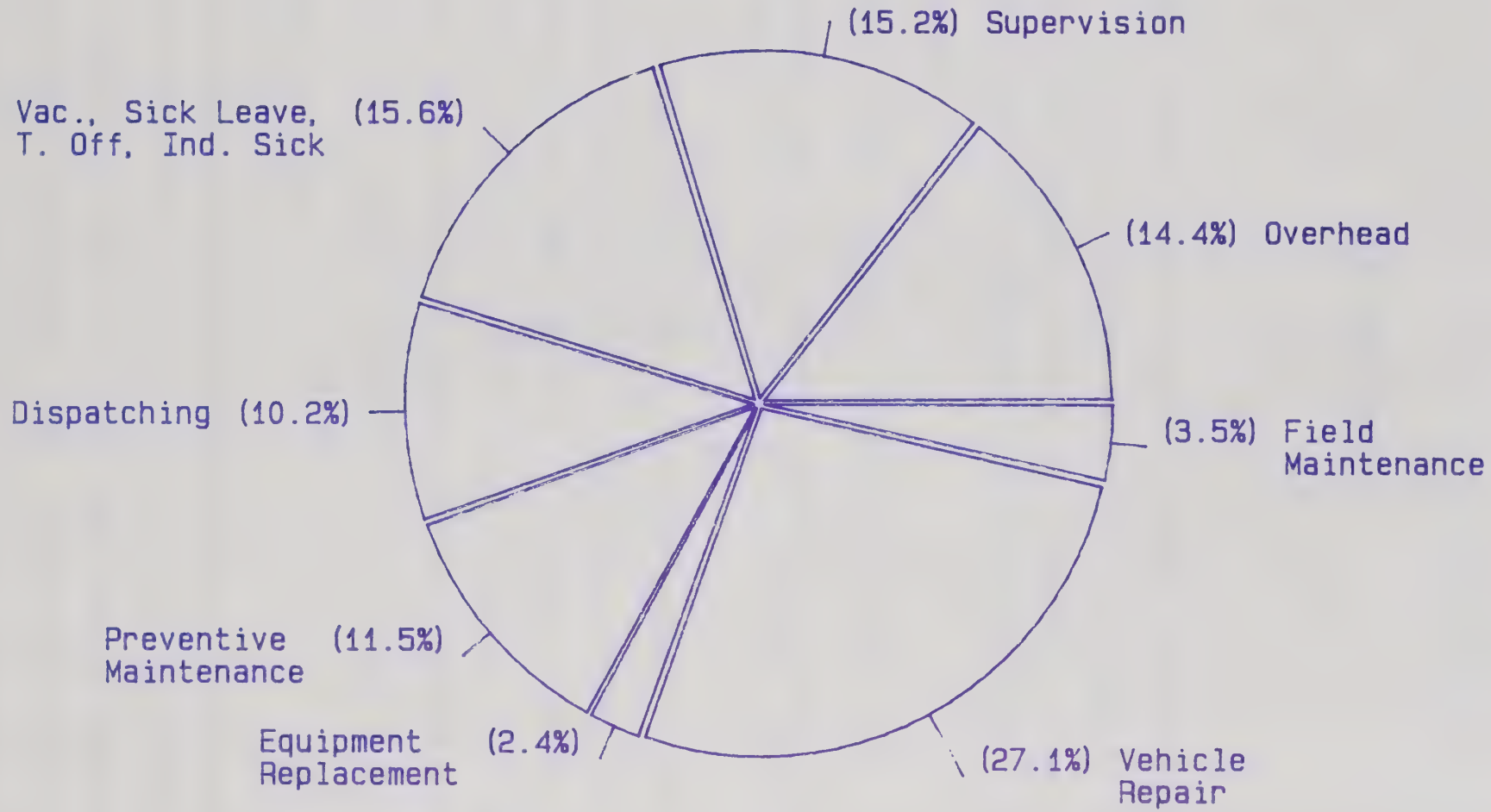
Figure 9

CITY OF SANTA MARIA

MECHANICAL MAINTENANCE

Man Hour Chart

1987-88



TOTAL MAN HOURS: 28,132

ARMMMHC

Figure 10

SOLID WASTE DIVISION

Collection

The collection section of the Solid Waste Division is responsible for the collection of mixed refuse from approximately 11,817 residential and commercial accounts using City personnel and equipment. Residential refuse is collected twice each week and the commercial accounts are serviced from one to six times each week.

As of August 1, 1987, residential collections are made by four one-man automated sideloaders (ASL). The commercial accounts are picked up by three frontloader drivers.

Since the newspaper program was initiated on February 1, 1974, the program has not progressed as planned. The market has become unreliable due to its fluctuating status. Along with this, it has become increasingly more difficult to find a creditable and reliable buyer. Therefore, the newspaper program has been stopped until an efficient and economical program can be implemented. Endeavors are ongoing to formulate a future program.

Special Waste Handling Program

To administer and manage this program implemented by the City Council in 1985, a newly created position was requested and approved in the 1986-88 budget proposal. This position title is "Solid Waste Inspector Coordinator". The position was filled as of January 2, 1988. The program continues to provide citizens a location to dispose or drop off vehicle waste oil as well as

household paint preventing this type of waste from being disposed of in the landfill.

The duties and responsibilities of this position are to receive, categorize by type and compatibility, and prepare the waste for transportation and disposal at a Class I hazardous waste facility; and manage the program and facility per State and local government hazardous waste standards and regulations.

The following illustrates the past Fiscal Year's activities.

Waste Oil: July 14, 1987 - June 13, 1988 = 4149 gallons received and recycled by Diamond Oil Services. Total cost $394.95

Paint: July 9, 1987 - July 9, 1988 = 3,160 gallons of latex paint with 158 drums shipped to Casmalia Resources at a cost of $15,995. Oil base paint received was 880 gallons and shipped 16 drums to Romic Chemical Corp. in east Palo Alto at a cost of $4,400.

Waste Oil

Upon a minimum of 2-55 gallon drums being filled, Diamond Oil Service of San Luis Obispo is notified for pumping out the drums to be recycled.

Paint

Paint is processed as soon as there is enough to fill a drum. Latex paint is solidified with vermiculite and shipped to Casmalia Resources. The oil base paint is emptied into 55-gallon drums and shipped to Romic Chemical Corp. in east Palo Alto for incineration. Upon filling one 4 Cu. Yd.

dumpster, N-G Chemical is notified for labpacking, transportation, and disposal at Casmalia Resources Class I facility.

Community Hazardous Waste Collection Day

The second hazardous waste collection day for Santa Maria Valley residents was conducted on October 10, 1987 at the Santa Barbara County Fairgrounds. Again, this project was planned and administered by the Community Environmental Council (C.E.C.). This area's previous such event was on 03/15/86. A third collection day is being planned for September, 1988; however, actual date not yet determined. Funding for future collection days seems questionable since Santa Barbara County is allocating less of the Casmalia Facility Tax Revenue to this effort County-wide.

Alternative Collection Methods/System Other Than Presently Practiced.

Following the Budget Committee's review of the Solid Waste Collection Budget for 1986-88 and realizing a substantial rate increase would be eminent due to a deficit budget, the Budget Committee authorized staff to research alternative residential collection methods/systems other that what is presently practiced.

As a result, administration approved the automation concept as an alternative. Therefore the Solid Waste Superintendent prepared a detailed report and program for budget consideration in mid-1986. On December 16, 1986, Council voted to approve the automated system. Following this approval, direction was given to order equipment and containers and to implement the new system in July-August 1987. The six new trucks and some 12,000 containers were received by July 1, 1987.

The Solid Waste Division (SWD) fully implemented the Automated Solid Waste Collection System to all residential accounts within the city's collection boundaries within the city limits. This program began with container distribution in July 1987, implementing routes as distribution in designated areas were completed. This procedure continued until all accounts and all routes were completed, with full implementation on August 1, 1987. Due to the efficiency of the automated sideloaders (ASL) with its full mechanical operation and naturally the employees proficiency, work productivities have increased substantially. Collection routes under the manual system averaged 500 homes, where 950 are realized with automation. What was done with 10 employees collecting 8 routes daily with the manual system, 6 employees collecting 4 routes daily are realized with the automated system.

Due to the increased volume the 90-gallon automated containers provide, as compared to the standard 2-32 gallon size cans, tonnage collected has increased; see Figure 12, Residential Tons Collected. As a result of the additional storage volume, residents are able to now dispose of waste that would normally be piled up or stored in yards due to an extra service charge when extra service was requested. There is still an extra service charge for extra waste, but rarely is this extra service requested.

For 1986 prior to automation, there were 9 injuries while still with the manual system; there are no injuries to date since automating.

The City made one of the most beneficial decisions by choosing to change residential refuse collection systems from the manual to a full automated system, as evidenced by a smooth streamline and cost saving system.

This system continues to operate very well and the City can now reap the positive benefits the automated system provides.

The following illustrates a more definitive explanation of savings realized ($ 511,830) as a result of automating the collection of residential solid waste per 1988-90 F.Y. budget proposal as compared to that of the 1986-88 F.Y. budget proposal with the manual system. Included in this figure is a 2-year savings of $ 218,415 (per Mechanical Maintenance) by comparing the depreciation rate and equipment operating costs of the 10 manual sideloader vehicles vs the 6 automated sideloader vehicles.

The following reflects a 2-year savings by comparing salaries, benefits, regular and holiday overtime for each fiscal year.

1986-88 FISCAL YEAR (MANUAL COLLECTION SYSTEM)

	1st Year	+	2nd Year	=	2-Year Total
Salaries	$ 236,180		$ 249,730		$ 485,910
Regular OT	20,730		21,790		42,520
Holiday OT	4,350		4,580		8,930
Retirement	64,710		69,420		134,130
Group Insurance	47,270		50,710		97,980
Sub-Totals	**$ 373,240**		**$ 396,230**		**$ 769,470**

1988-90 FISCAL YEAR (AUTOMATED COLLECTION SYSTEM)

Salaries	$ 152,760		$ 159,780		$ 312,540
Regular OT	10,280		10,750		21,030
Retirement	36,750		38,460		75,210
Group Insurance	32,980		34,300		67,280
Sub-Totals	- $ 232,770		- $ 243,290		- $ 476,060
Total Personnel Savings	$ 140,470		$ 152,940		$ 293,410
Total Equip. Depre. Savings	+ 51,610	+	55,740	+	107,350
Total Equip. Oper. Savings	+ 53,400	+	57,670	+	111,070
TOTAL SAVINGS	**$ 245,480**		**$ 266,350**		**$ 511,830**

Supervisory, Areas of Responsibility

Effective January 1, 1987, Division Field Supervisory staff were re-assigned to provide cross training, and to further broaden there knowledge and gain additional experience in the Solid Waste Field areas of supervisory responsibility.

Capital improvements added this year consist of 100 new refuse bins purchased for new accounts.

Figure 13 is a comparison of the number of miles traveled by all Solid Waste Division trucks for each calendar year. Following are facts which have resulted in increases/decreases:

1974 -	Decrease; Energy Shortage
1975 -	Increase; New Construction & New Scales Installed (CHP overweight warning)
1981 -	Residential Decrease; Balancing Routes
1982 & 83 -	Residential Increase; New Construction
1986-87 -	Residential Increase; New Construction

Figure 14 indicates the number of accounts for each year for residential and commercial service over the past 15 years. A point to be noted is the 1979 and 1986 account figures were taken from the number of water meters in the City which included accounts serviced by Health Sanitation Service. Commencing with 1980, the accounts are actual per computer print out.

Figure 15 shows the total tons hauled for both residential and commercial customers the past 7 years for the calendar year.

Disposal

The disposal section of the Solid Waste Division is responsible for operation of the City Landfill along the easterly terminus of East Main Street. This involves the spreading, compacting and covering of all refuse produced in the City, as well as all produced by residents adjacent to the City in San Luis Obispo and Santa Barbara Counties. This also includes estimating small pickup loads and collecting cash or issuing charge tickets for all loads dumping at the Landfill. Some of the associated activities are comprised of constructing and maintaining the access road and erecting fences for the control of blowing paper.

Increases in dumping fees were instituted during the fiscal year; 15% for 07/01/87 and 15% for 07/01/88 to cover increased operating costs.

Figure 16 shows the acreage used through the calendar years from 1971 to 1987. The variation from a normal increase each year, starting in 1971-72 to present, is caused by the different types of land being used (reuse of the old landfill versus clean land). The reduction in land used in 1975, 1976, 1977 and 1982, 1983, 1984, 1986 and 1986 was caused by raising the height of the finished fill higher than in previous years and the use of a compactor, in addition to the clean land now being used. Increased land usage generally is the result of not going above the levee height to make a contoured hill and increased use of the Landfill by the public. In March 1983, 84 additional acres were purchased adjacent to the existing facility.

Approximately 187 acres of clean land are remaining for the existing Landfill operation as of June 30, 1988, which includes an additional 84 ac. which is presently not permitted for Sanitary Landfill purposes.

Figure 17 indicates the total number of tons received at the Landfill for the various calendar years since operation of the scales commenced and the average tons received per day for the calendar year beginning in 1980. These figures are reported on a quarterly basis to the Regional Water Quality Control Board in compliance with Order No. 86-85 adopted June 13, 1986.

Figure 18 indicates the total loads for the year and average number of loads/day received at the Landfill beginning with calendar year 1981.

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
SOLID WASTE DIVISION
EXISTING ORGANIZATION CHART

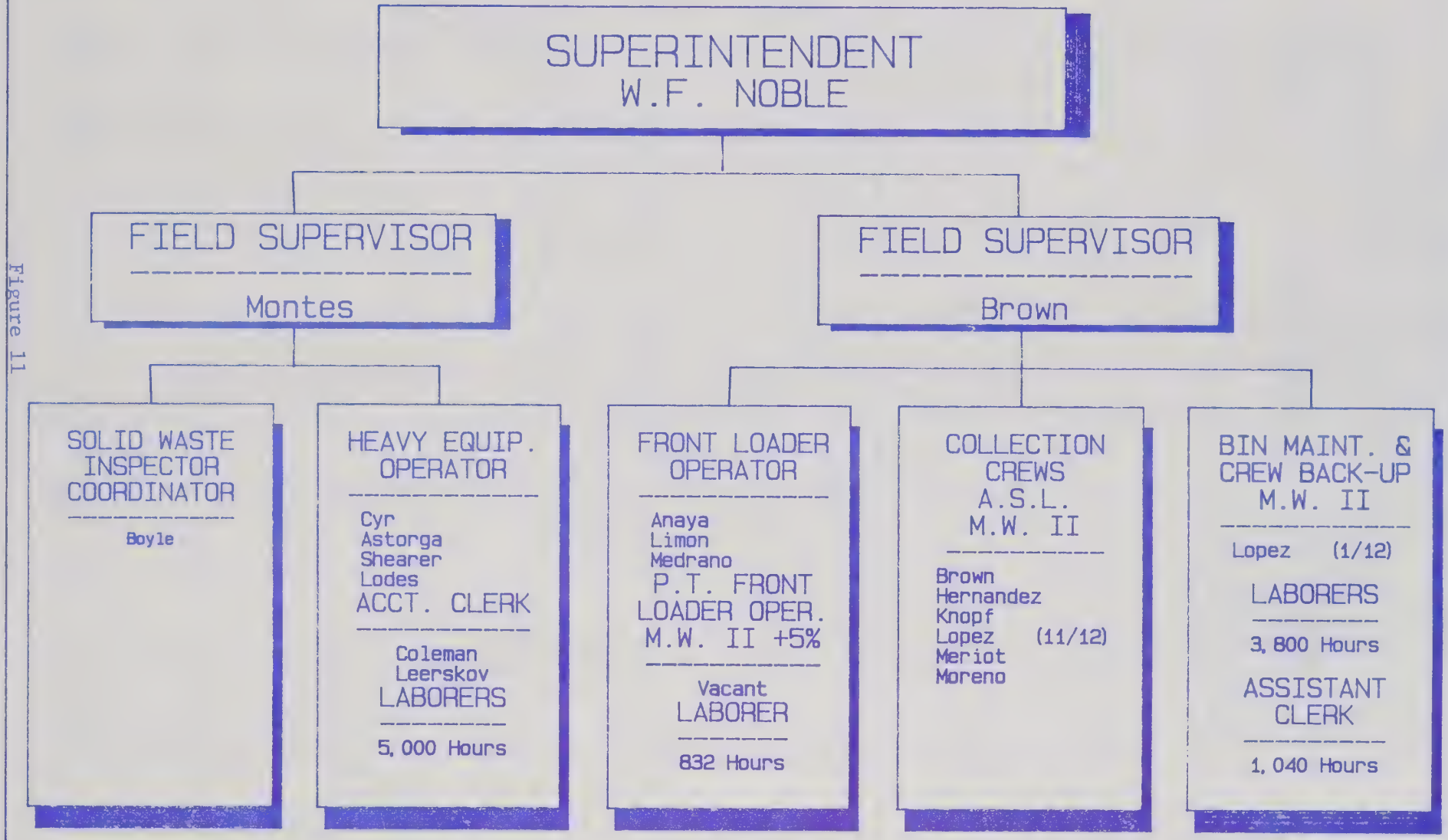


Figure 11

CITY OF SANTA MARIA

SOLID WASTE DIVISION

Residential Solid Waste Collection

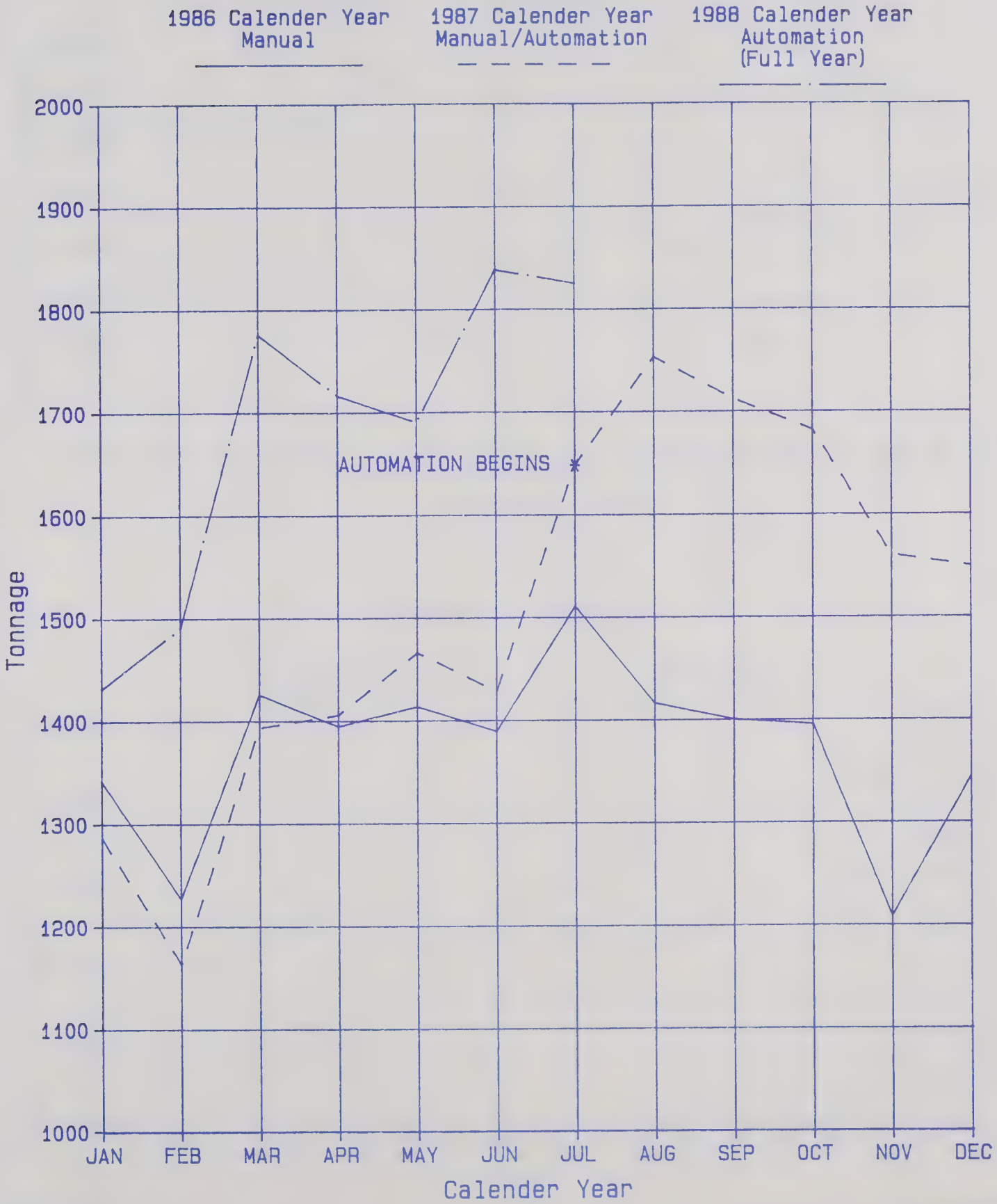


Figure 12

ARSWDRWC

CITY OF SANTA MARIA

SOLID WASTE DIVISION

Miles Traveled

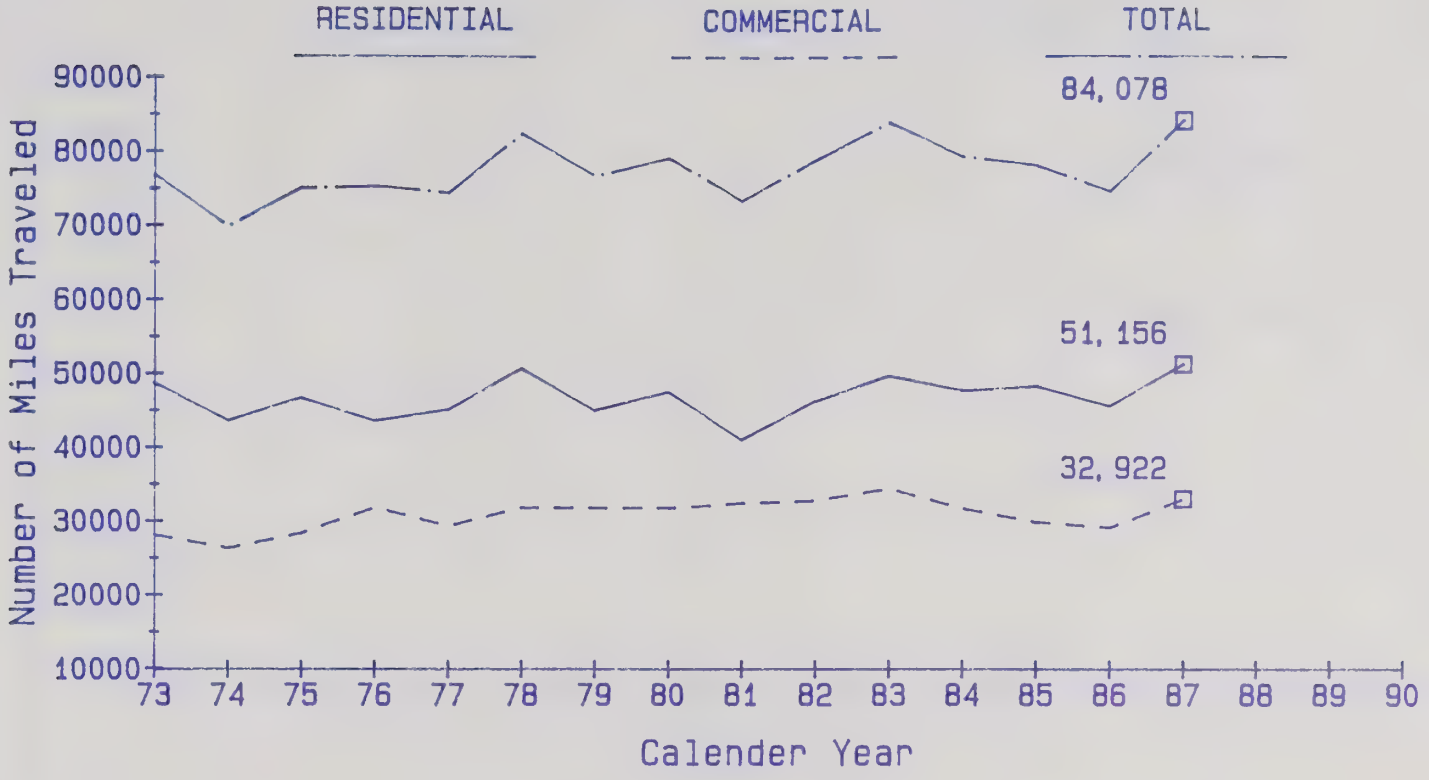


Figure 13

Number of Accounts

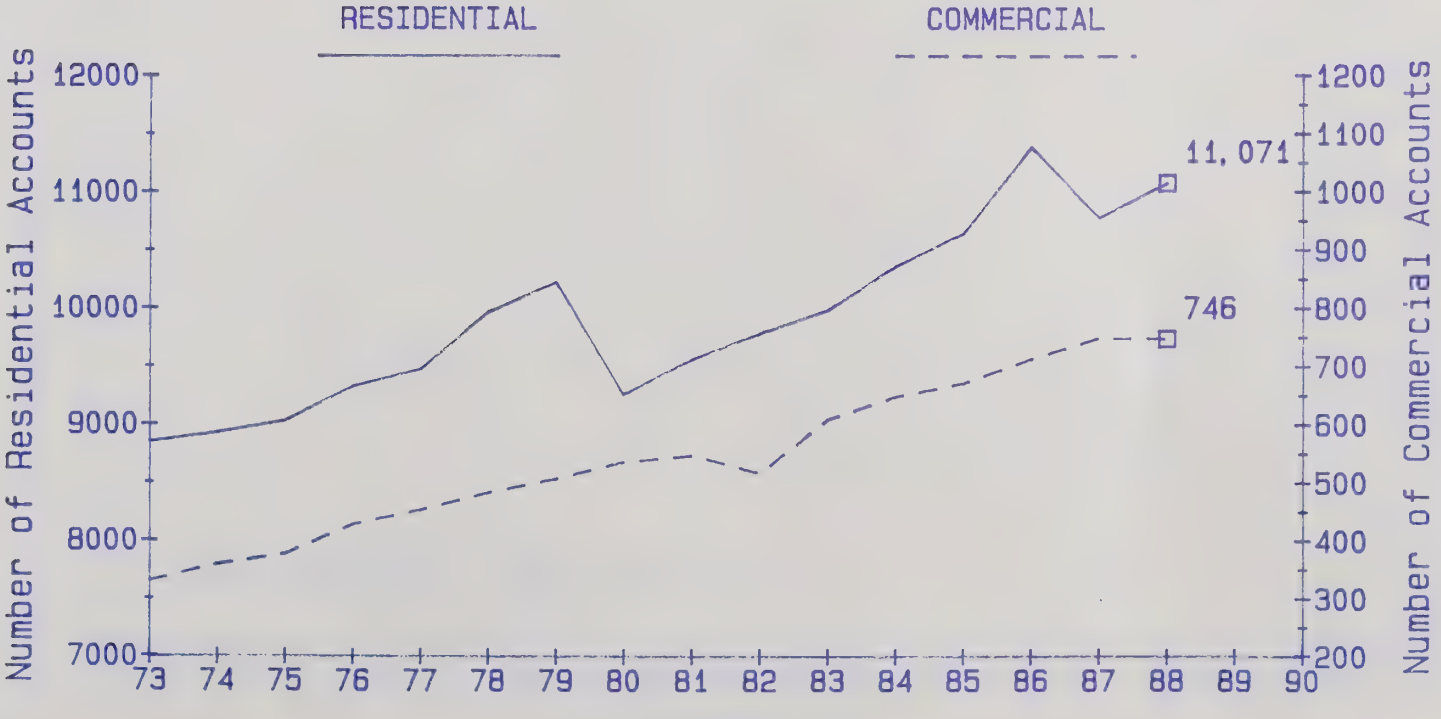


Figure 14

ARSAD (MT-A)

CITY OF SANTA MARIA

SOLID WASTE DIVISION

Number of Tons Hauled

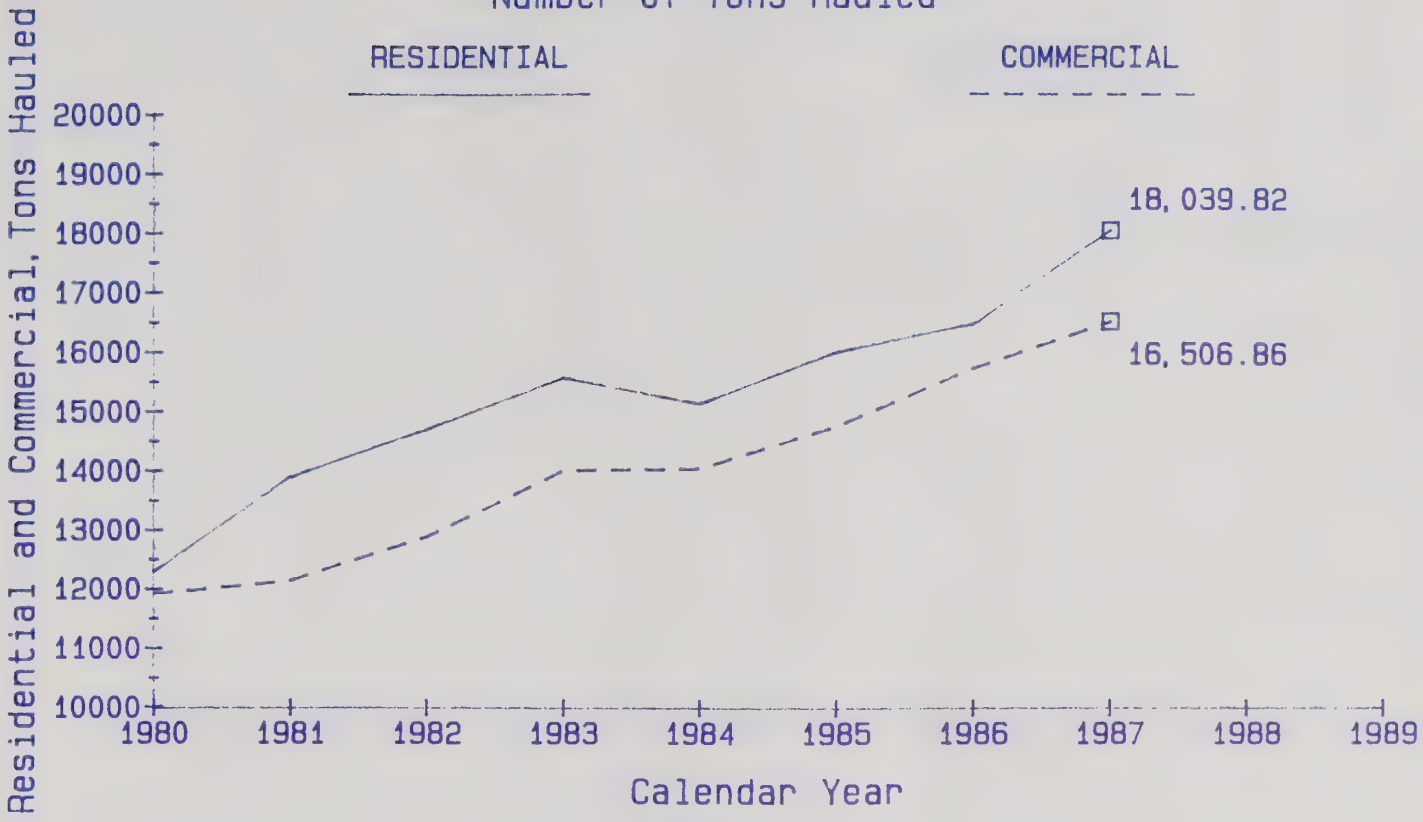


Figure 15

Landfill Acres Used Per Year

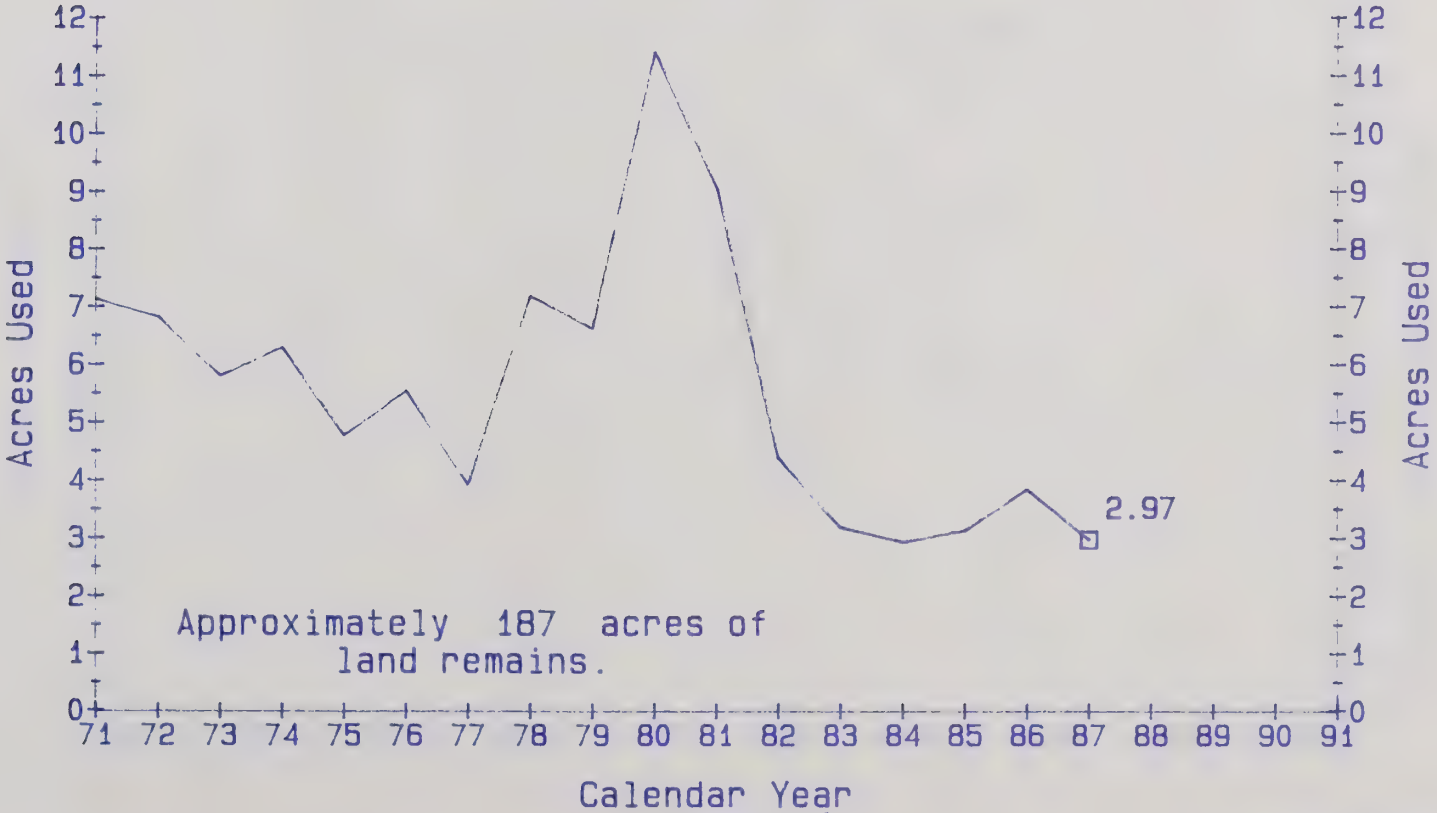


Figure 16

ARSAD (TH-AU)

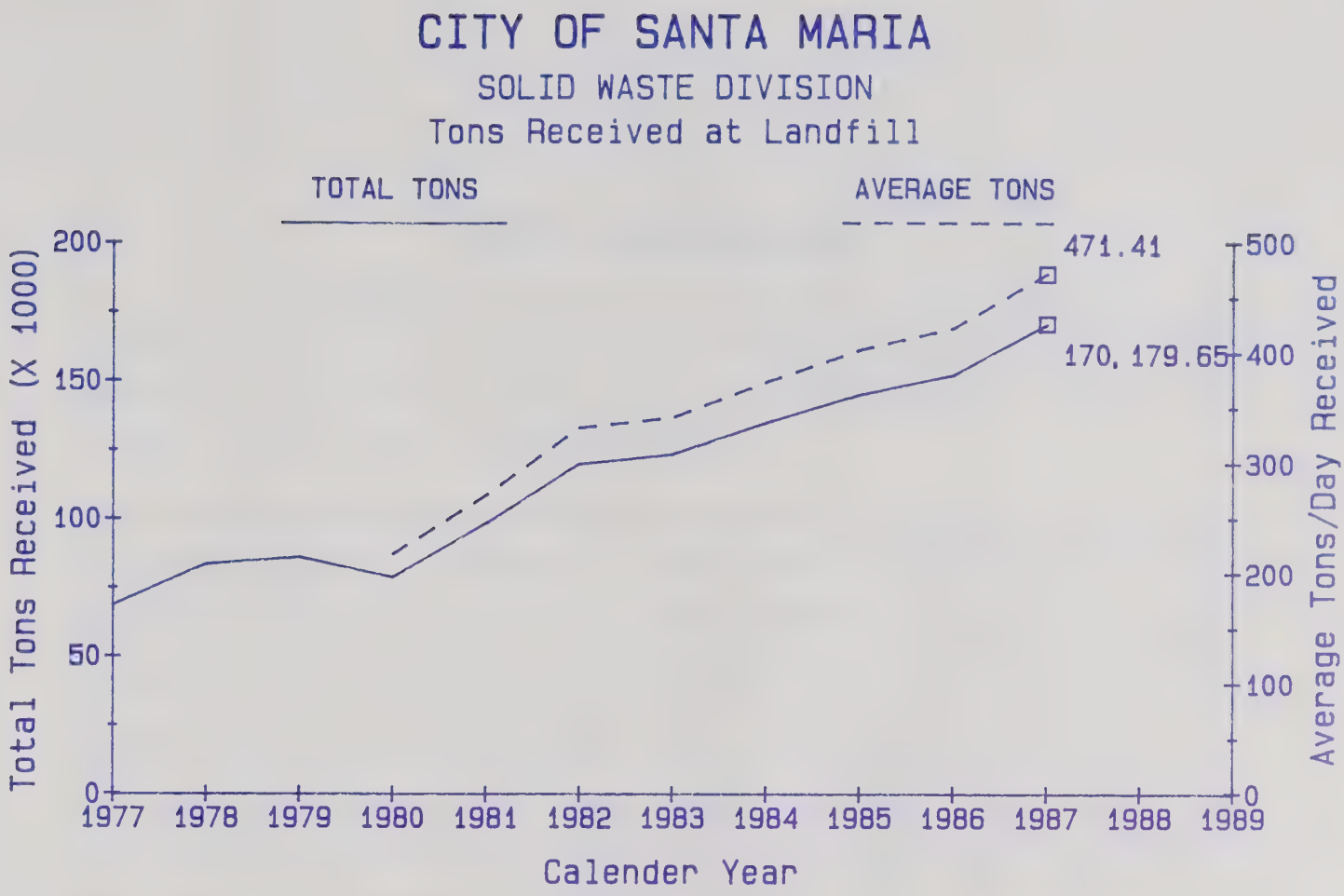


Figure 17

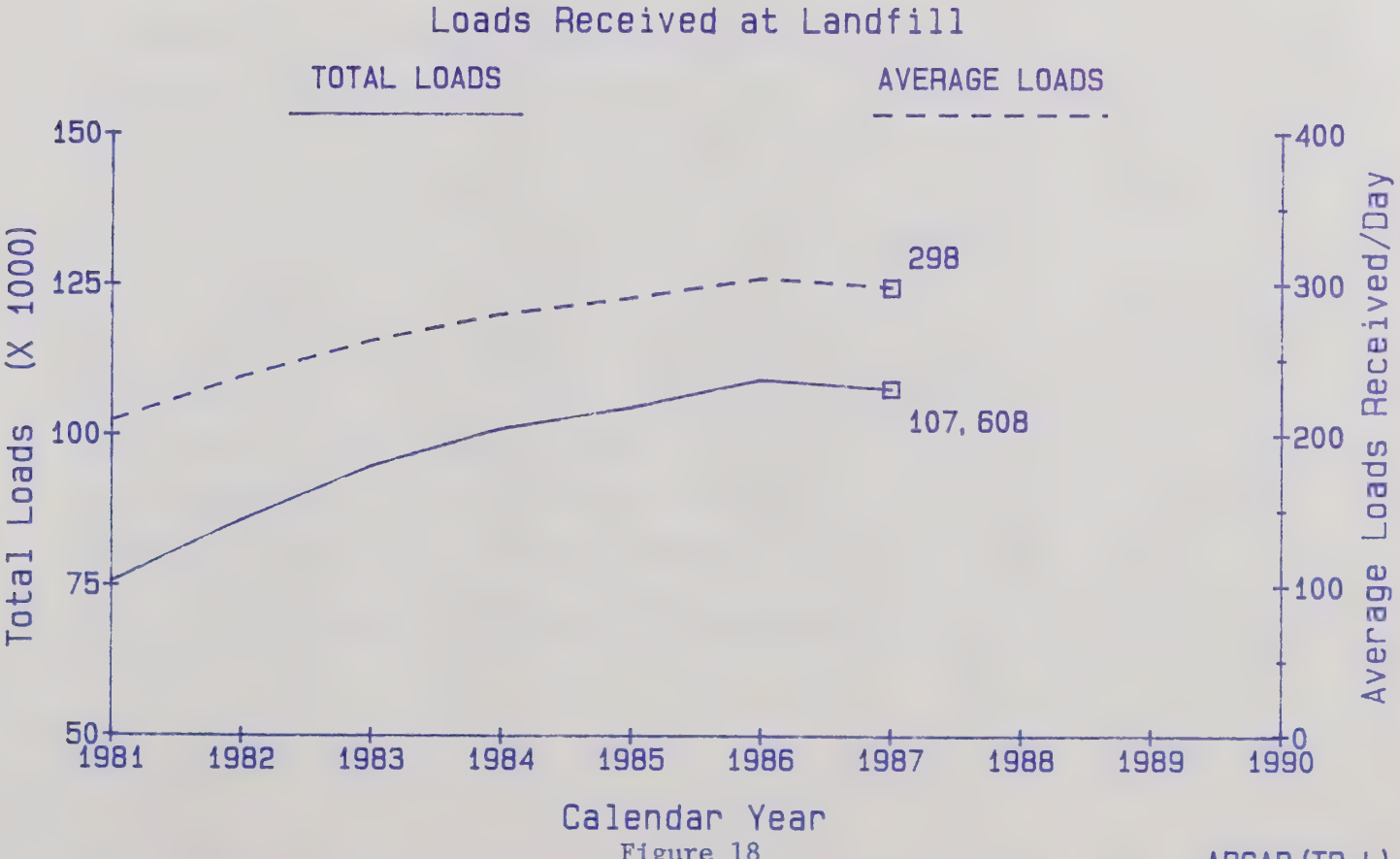


Figure 18

ARSAD (TR-L)

STREET AND SEWER DIVISION

The Street and Sewer Division is responsible for preventative and regular maintenance of the City streets with appurtenant facilities. This includes emergency maintenance or repair caused by accidents, weather conditions, settlement or other unusual unexpected damage.

The developed Pavement Evaluation and Maintenance Management System enable the Street Division to maintain the approximately 336-lane miles of streets within the City system, using the latest pavement management and computer techniques. Prepared reports summarize the present and future condition of flexible pavement and suggested cost-effective maintenance strategies, as well as total cost for maintenance and/or repair of the City's pavement system.

The degree and type of maintenance for each street or portion thereof in the total City street system is determined by the Street Superintendent taking into consideration Pavement Evaluation and Maintenance Management System reports and monies available.

High on the priority list is proper scheduling and planning of routine preventative maintenance procedures in order that any inconvenience to the public is kept to a minimum. Every effort is made to speedily correct hazardous conditions, which interfere with the safe flow of traffic, vehicular or pedestrian. Safety for the public is our primary consideration.

The Street Division composition for period July 1, 1987 - June 30, 1988 was as follows: Street Superintendent, Street & Sewer Supervisor, Electrical Supervisor, four (4) Crew Leaders Maintenance Specialists, two (2) Electricians, two (2) Motor Sweeper Operators, eight (8) Maintenance Workers II, four (4) Labor III, for a total personnel strength of twenty three (23). This division was augmented with three (3) works aids during the summer program.

The major maintenance activities conducted by the Street Division are as follows:

1. Travelway Maintenance

   a. A/C Repair - Overlays - Chip Seal Coat
   b. Street Sweeping
   c. Concrete Improvement Repair
   d. Installation & Maintenance of Signs
   e. Pavement Delineation
   f. Street Illumination and Electrical Maintenance
   g. Traffic signal light maintenance

2. Drainage Maintenance

3. Wastewater Collection System Maintenance

4. Weed Abatement

5. Town Center Mall East; Town Center Mall West; Stowell Lighting & Parking Maintenance District and the City's Parking District

1. TRAVELWAY MAINTENANCE

a. Asphalt repair, overlays - chip seal; fog seal: The preservation, upkeep and restoration of 336 lane miles or 152 center line miles (no change from last year) of flexible pavement is the maintenance responsibility of this Division. Annual travelway maintenance for fiscal year 1987-88 consisted of two (2) major operations.

The chip seal operation consisted of placing 11,411 ton of gravel chips, 381,360 gallons of asphaltic emulsion CRS-2 (Binder), and the application of 79,760 gallons of dust control to 1,271,211 sq. yd. of street pavement, the restriping of 32,270 lineal feet of lane lines, repainting of 3,048 sq. ft. of pavement stencils and the placing of 240 reflectorized pavement markers to include traffic control, for a cost of $535,350.20.

Fog Seal operation consisted of applying 5,160 gallons of asphaltic emulsion SS-1-H to 748,500 sq. ft. of street pavement for a cost of $8,988.75.

Total cost for the 1987-88 Street Maintenance contract was $544,338.95.

b. Street Sweeping: City residential streets were swept on a bi-weekly schedule with the business area on a daily basis. The two motorized sweepers and a back up motor sweeper were operational approximately 520 sweeper days. The 20.0 days the sweepers were not operating were due to service repair, inclement weather, holidays and compensatory time off. The two sweepers and back up sweeper removed and hauled to the landfill 2,113 tons of material swept off the City streets, using 31 pickup brooms and 56 gutter brooms.

c. Concrete Improvement Repair: This activity involved the repair of concrete improvements (sidewalks, curbs and gutters) damaged by tree roots or City-owned property. The 2 1/2 men crew completed 53 work orders for a total of 9,667.5q. ft. There were 265 concrete improvement damaged service requests and 515 locations of concrete improvements damaged reported due to Recreation and Parks Dept. tree survey conducted during this period which are caused either by tree roots, City property (trucks), and/or private property. Temporary asphalt repairs continues on all hazardous sidewalk service requests and are made within a very short period of time, in most cases, the same day. Presently, this division has a backlog of approximately 1,570 known locations, a 99% increase over 1986-87 known locations, of tree root damaged concrete improvements.

d. Installation & Maintenance of Signs: This program includes all work performed in signing as a traffic control device. Signs are placed on City streets for the purpose of warning, regulating or guiding traffic. The work may consist of the fabricating, purchase, assembly and installation of new signs; replacement of existing damaged signs and their repair and cleaning. Signs are replaced or repaired when they become defective due to age, weathering, vandalism, accidents or any other types of wear and tear. Following is a summary of this activity:

Type Sign	New or Reinstall Damaged	Reface Sign, Plate & Reinstall
Regulatory	231	132
Guide	181	155
Warning	163	77
Neighborhood Watch	19	3

Also, 67 barricades were repaired for use by division crews during their normal work activities.

e. Pavement Delineation: The pavement delineation program involved all work necessary to maintain and replace traffic directional street markings. Work included layout, removal of old stripes, painting of new or existing stripes limited parking zones, restriping of pavement lane lines, stencils and parking lines after the annual Street Maintenance Program. This required the use of 1,291 gallons of traffic paint, 2.0 tons of beads, approximately 90 gallons of lacquer and paint thinner.

f. Street Illumination and Electrical Maintenance: Street illumination is a major responsibility of this division and consists of the upkeep of 3,665 street lights, 2.1% increase over fiscal year 1986-87.

This maintenance operation required the replacement of 449 photo cells, 787 lamps (various sizes) 23 luminaires, and 20 street light standards. Included in this operation is the light maintenance of five City parking lots, Santa Maria Town Center Mall parking lots, parking structure and Stowell Shopping Center parking lot. Also, the maintenance activity includes electrical service, as required, by all departments and their subordinate divisions for installation of new machines, electrical circuits, changes in electrical circuits and electrical repairs.

g. City owned traffic signals maintenance: Street Division Electrical Crew, has the responsibility of maintaining sixteen (16) City owned traffic signal lights. During this period two new Electrical Maintenance Personnel have received additional formal instructions on traffic signal operation and maintenance, and on the job training with the cooperation of the City of Ventura's Traffic Signal Maintenance operations. This approach has been taken to qualify new Electrical Crew Members to inspect, maintain, and adjust traffic signals for the purpose of safe and orderly traffic movement at street intersections.

Call back operation has been coordinated and is initiated through the Police Department, for response, on any time after normal working hours, weekend or holidays.

2. DRAINAGE MAINTENANCE

During fiscal year 1987-88, 300 ft. of underground drainage (Enos) were installed bringing the approximate total footage of our underground drainage system to 51,680 ft. The underground drainage facilities now in existence has reduced the flooding of intersections on some of our major arterials and other streets. The present maintenance operations include flushing of 110 intersection culverts, grading and weed control of ten (10) major drainage ditches; this work occurs twice annually with a two man crew and contract applications of herbicide weed control to 88,165 sq. ft. at a cost of $770.80.

3. WASTEWATER COLLECTION SYSTEM

The Street Division has the responsibility of maintaining approximately 130 miles of City Wastewater collection system, an increase of 0.6% from 1986-87.

This activity consisted of immediate responses to 96 City Wastewater collection system stoppage service requests, 41 City/55 Private property responsibility. Total requests represents a decrease of 22% (less than) 1986-87. The Wastewater collection system scheduled maintenance of 265,110' reflects an increase of 18.8% over 1986-87.

4. WEED ABATEMENT

The weed abatement program takes most of seven months to complete and is conducted in five phases:

I Early-fiscal year lot inspection

II Posting lots for herbicide weed abatement

III Application of herbicide weed control during mid fiscal year

IV Posting lots for weed abatement and debris removal, manually and/or with equipment

V Manual abatement of weeds and cleaning of lots. This phase runs into the following fiscal year.

All phases require the posting and compilation of cost records to assure proper billing for each lot; all of which is forwarded to the City Clerk for the filing of assessment against the property. The herbicide weed abatement program during fiscal year 1987-88 came to a total of 5,001,620 sq. ft. (a decrease of 0.29% from last year) for a cost of $ 20,020.80. The decrease in square footage treated is due to construction on vacant lots. The hand cleaning Weed Abatement Program consisted of cleaning 67 lots for a total cost of $2,405.30. Total cost of Abatement Program for 1987-88 was $ 22,426.10.

5. TOWN CENTER MALL EAST, TOWN CENTER MALL WEST, STOWELL PARKING & LIGHTING DISTRICT AND CITY OF SANTA MARIA PARKING DISTRICT

The Stowell and Santa Maria Town Centers landscaping and parking area maintenance is performed by private contractors under the administration of the Street Division. Review for compliance with bid specifications and administration of expenditures in accordance with the contracts are the primary responsibilities. Performance standards are determined by periodic inspections and notifying the contractor of any deficiencies.

The Parking District consists of five existing City-owned public parking lots as follows:

1) 100 Blk. West Church (mid-block/north side)
2) 200 Blk. West Church (mid-block/north side)
3) 200 Blk. West Chapel (southeast corner Chapel and Pine)
4) 200 Blk. East Main (north side)

Maintenance consists of painting parking spaces, sweeping, pavement repairs and parking lot lights.

Figure 20 depicts man-hours required for various segments of the Street Division maintenance responsibilities. Figure 21 depicts man-hours required for various segments of the electrical maintenance responsibilities of this Division for fiscal year 1987-88.

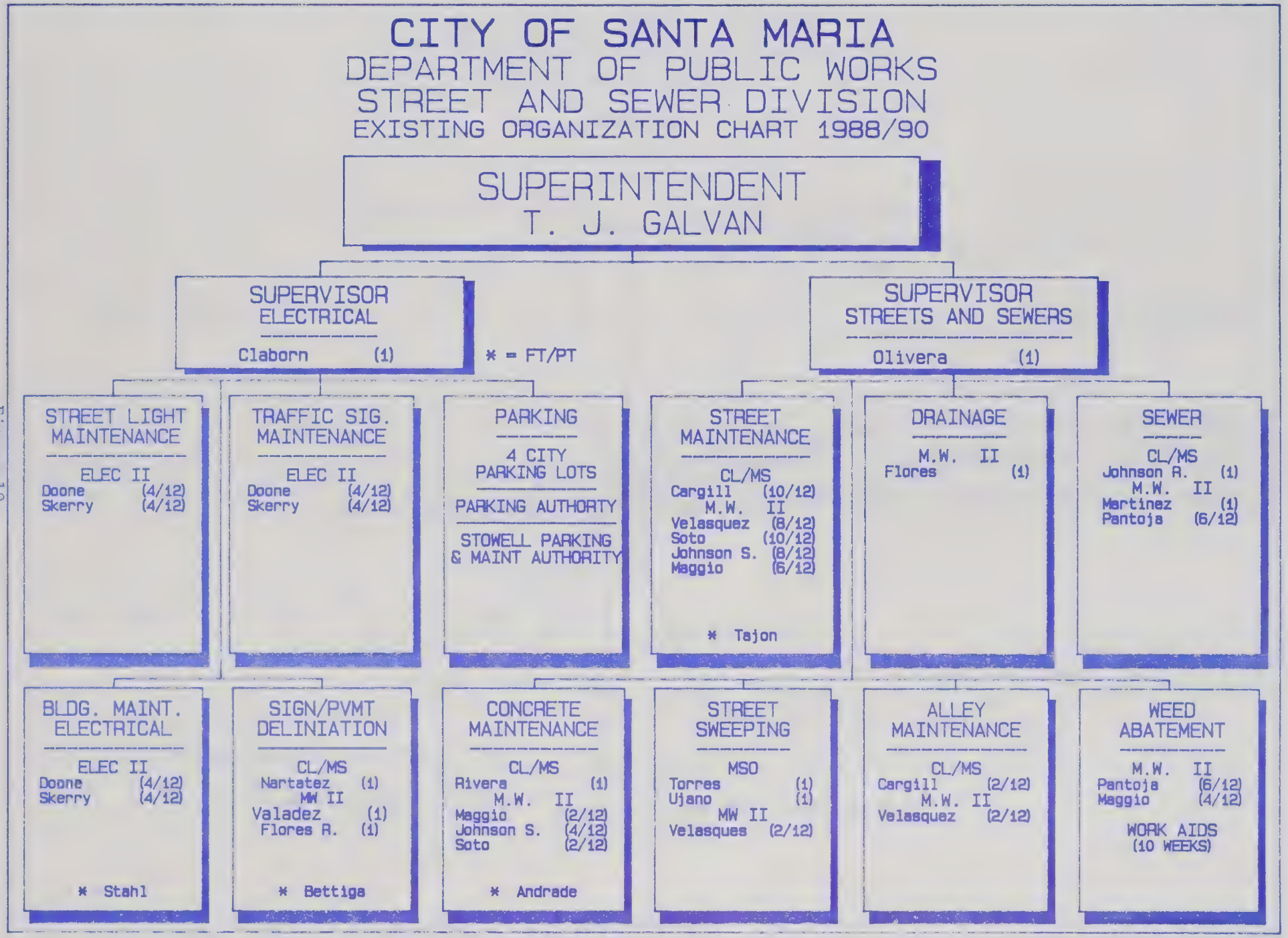

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
STREET AND SEWER DIVISION
EXISTING ORGANIZATION CHART 1988/90
SUPERINTENDENT
T. J. GALVAN
SUPERVISOR
ELECTRICAL
Claborn (1)
* = FT/PT
SUPERVISOR
STREETS AND SEWERS
Olivera (1)
STREET LIGHT MAINTENANCE
ELEC II
Doone (4/12)
Skerry (4/12)
TRAFFIC SIG. MAINTENANCE
ELEC II
Doone (4/12)
Skerry (4/12)
PARKING
4 CITY PARKING LOTS
PARKING AUTHORTY
STOWELL PARKING & MAINT AUTHORITY
STREET MAINTENANCE
CL/MS
Cargill (10/12)
M.W. II
Velasquez (8/12)
Soto (10/12)
Johnson S. (8/12)
Maggio (6/12)
* Tajon
DRAINAGE
M.W. II
Flores (1)
SEWER
CL/MS
Johnson R. (1)
M.W. II
Martinez (1)
Pantoja (6/12)
BLDG. MAINT. ELECTRICAL
ELEC II
Doone (4/12)
Skerry (4/12)
* Stahl
SIGN/PVMT DELINIATION
CL/MS
Nartatez (1)
MW II
Valadez (1)
Flores R. (1)
* Bettiga
CONCRETE MAINTENANCE
CL/MS
Rivera (1)
M.W. II
Maggio (2/12)
Johnson S. (4/12)
Soto (2/12)
* Andrade
STREET SWEEPING
MSO
Torres (1)
Ujano (1)
MW II
Velasques (2/12)
ALLEY MAINTENANCE
CL/MS
Cargill (2/12)
M.W. II
Velasquez (2/12)
WEED ABATEMENT
M.W. II
Pantoja (6/12)
Maggio (4/12)
WORK AIDS
(10 WEEKS)

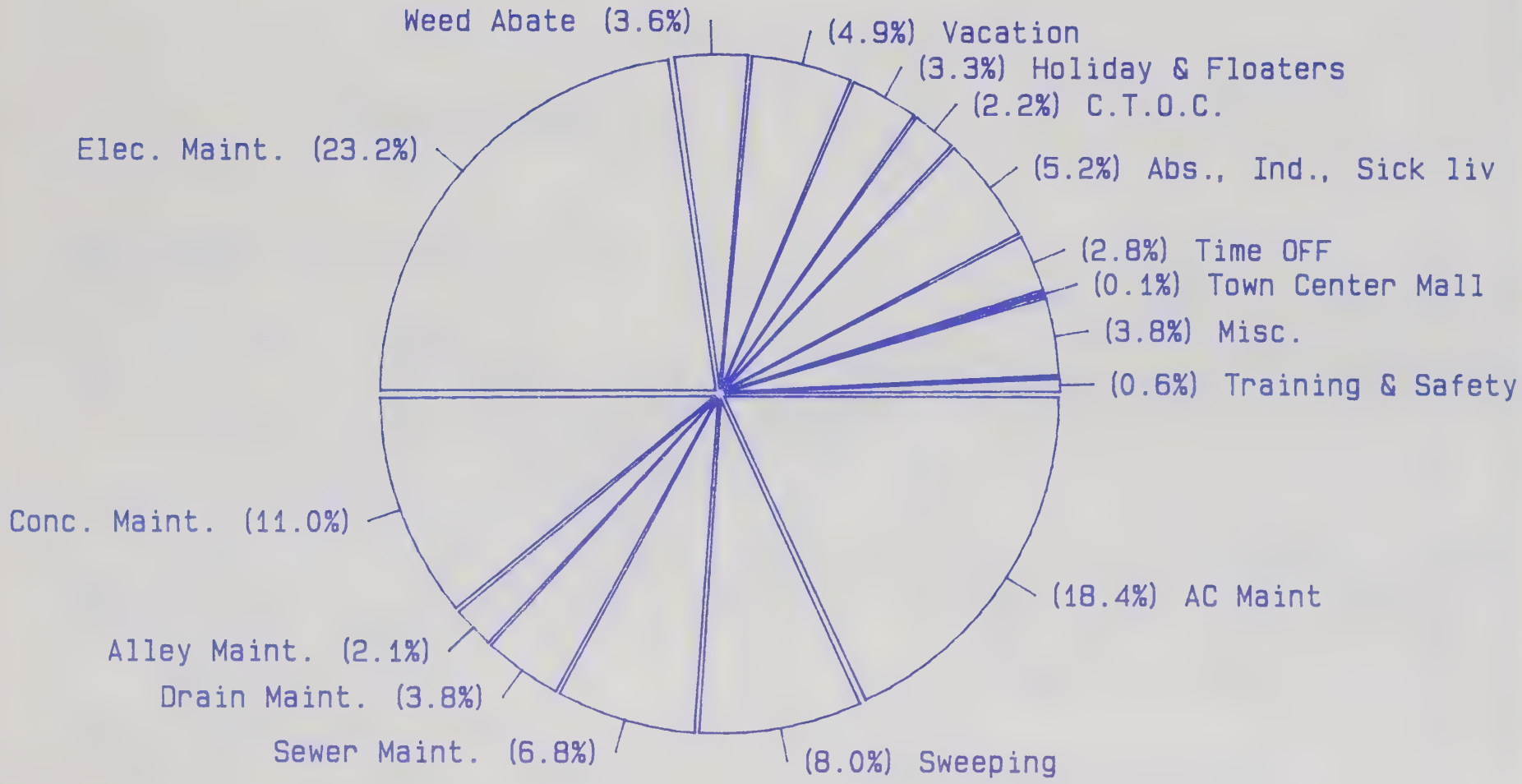
Figure 19

CITY OF SANTA MARIA

Street and Sewer Division

Manhour Utilization

1987-88



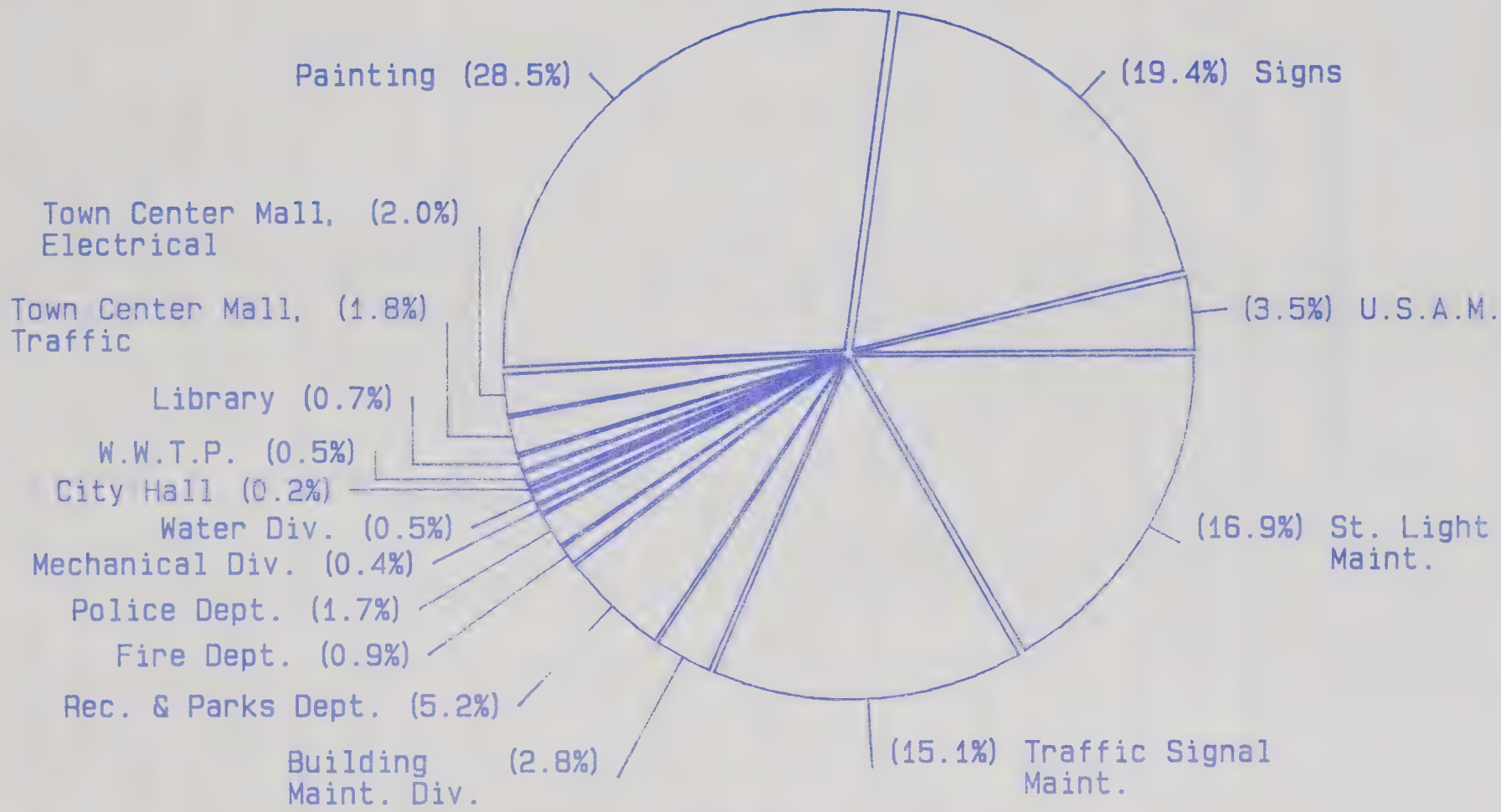
TOTAL MANHOURS 1987-88: 49,893.5

ARSDIVMU

Figure 20

CITY OF SANTA MARIA

Street and Sewer Division
Electrical Manhour Utilization
1987-88



TOTAL MANHOURS 1987-88: 11,548.5

ARSDIVEM

Figure 21

WASTEWATER TREATMENT DIVISION

The Wastewater Treatment Plant is located on Black Road approximately 2.5 miles west of Santa Maria. Its purpose is to treat all domestic and industrial waste collected and conveyed by the wastewater collection system at a reasonable cost. The City of Santa Maria has treated and disposed of wastewater at the present site off Black Road since 1910. The treatment plant is designed to serve a population of approximately 54,000. This includes the capacity to treat over 2 MGD of flow from the City's industries. The average daily capacity of 6.5 MGD, on an annual basis, should be sufficient until mid-1992. During the past year, the average daily flow was 5.76 MGD which is an increase of 2.5% over the previous year. Service is provided mainly to residential, commercial and industrial development within the City plus a few adjacent areas that are within the county except the southern side of the Santa Maria Airport which, by agreement, is serviced by S. B. County Laguna Sanitation District.

The treatment process removes 93% of the suspended solids (ss) and 92% of the biochemical oxygen demand (BOD) contained in the wastewater. The land disposal system removes an additional percentage of these pollutants and a portion of the nutrients normally found in wastewater, including nitrogen and phosphorus. The plant effluent is suitable for irrigation of permanent non-dairy pasture land and fodder crops. All effluent is discharged on city property and 36% of the flow is disposed of on the fodder crops. The Santa Maria High School F.F.A. have been pasturing their sheep here as a class project; in turn, they disburse the water, maintain banks and levees, do weed control and

maintain the fences. Digested sludge averaged 53% volatile reduction. This sludge is dried in earthen beds and can be used as a soil conditioner for landscape so specified in the plant's discharge permit.

Maintenance this past year included replacing all air lift pumps steel piping to P.V.C., overhauled #2 raw sludge pump, replaced a 2" backflow prevention device, replaced plant main circuit breaker, #1 plant drainage pump was overhauled, installed new "no trespassing - wastewater storage and property irrigated by wastewater" signs around the property lines.

Line maintenance has been a problem this past year and to the present with small snails growing in the trickling filters. Vacuum trucks are rented periodically to remove them out of plugged lines. Struvite (magnesium ammonia phosphate) is still accumulating in digester drain lines. The only way plant personnel has found to remove this material is by using sewer cleaning truck with the root cleaner attachment.

A test was run on the plant effluent with only one (1) secondary trickling filter running. The test proved that the plant is running well below the R.W.Q.C.B. requirements with one filter shut down. This is attributed to the plastic filter media installed one year ago.

The plant is maintained and operated by one Superintendent, one Plant Supervisor, one Chemist, one Source Control Inspector and five Operators, (Figure 22). All plant personnel are currently certified by the California State Water Resources Control Board, including Source Inspector and Chemist. The Source Inspector took and passed the test for higher certification (Grade 4).

Plant tours, by students and other interested groups, continue to be given upon request. A total of 72 people toured the plant this fiscal year. Visitors are shown and told about the various components of wastewater treatment used at the plant. Generally, the tours are concluded with a visit to the laboratory where a question and answer session is held.

Bird watching is a regular event at the Wastewater Treatment Plant ponds. A total of 135 bird watchers signed in this past year.

The tests shown in Figure 23 were performed in the wastewater treatment plant laboratory. Certain tests required by the State Water Quality Control Board were beyond the scope of the plant laboratory. For this reason, Chemical Research Laboratory performed these tests, under contract, for the annual analysis (heavy metals, MBAS, phenols, polychlorinated byphenyls, and total chlorinated hydrocarbons). The results of these tests aid in plant operation and, in some cases, reflect plant efficiency or indicate where more source control is needed. In addition to the above, BOD and Total Nonfiltrable Residue (TSS) tests were performed on industrial waste discharges to the wastewater collection system, as necessary for wastewater strength determinations and charges as required under the wastewater ordinance.

It is noteworthy to make a comparison of statistics on the top of Figure 23 for electrical energy used and gas produced with the previous fiscal year. During 1986-87, 1.626 million Kwh or an average of 4,455 Kwh daily of electrical energy was consumed. Likewise, during 1986-87, 29.918 million cubic feet or an average of 81,968 cubic feet of gas was produced daily.

Industrial Source Control - 1987-88

The Industrial Source Control Unit is comprised of one full time Inspector and one part time clerk/computer aide.

This unit is responsible for regulating and monitoring all industrial wastewater discharges for constituents which exceed allowable discharge limits, are prohibited from being discharged, cause damage to the City's collection system, or deleterious to treatment plant processes and personnel. Source Control is also responsible for investigating and reporting to the proper agencies any discharges which may be harmful to the environment or pose a public health or safety hazard.

Approximately 632 files containing concise information as required by Federal and State requirements are maintained on industries and businesses. A breakdown with the amounts in the various classes, amount of those permitted, and a brief description of each class is as follows:

Class I	Commercial Inactive, not on the City sewer system.	
	Total in Class I: 31**	Permitted: 0
Class II	Non-Industrial Discharger, sanitary sewage discharged only.	
	Total in Class II: 275	Permitted: 50*
Class III	Industrial Discharger with a flow less than 25,000 GPD.	
	Total in Class III: 321	Permitted: 176
Class IV	Industrial Discharger with a flow greater than 25,000 GPD.	
	Total in Class IV: 5	Permitted: 5

* Sanitary Discharge Only - hazardous material used in process or stored on site.

** This class is evaluated annually.

Two hundred five Wastewater Discharge Permit Applications were mailed out during the fiscal year. A majority of the applications were returned to this office, and most were determined to be Class II dischargers and are not required to be permitted, except for those businesses where hazardous chemicals/materials are used in process or stored on site. A total of 45 new permits were issued during this fiscal year.

There were a total of 96 inspections performed during this fiscal year. Source Control received numerous complaints in regards to waste disposal practices by industries/businesses and by local citizens disposing of hazardous material or material which caused a public health hazard. Each case was investigated by the Inspector and referred to the proper County or State regulatory agency. Inspections of grease, sand, and oil interceptors continued over the year; some of these were required to be upgraded, modified or replaced due to inadequate removal efficiency.

All Class IV and Categorical Industries, are required to submit self-monitoring reports. Microwave Applications Group, Mission Linen Supply, Ramsey Laboratories, Santa Barbara Research Center, Santa Maria Chili, Simplot Foods, have been submitting self-monitoring reports, in accordance with conditions in their Wastewater Discharge Permits. Source Control continues to sample these and other industries/businesses periodically to ensure compliance with Federal, State and Local discharge limitations.

There have been several projects undertaken by Source Control; one of these has been the continuing effort to update files on all businesses and industries. With the acquisition of an IBM compatible computer and software in March 1988, the situations encountered with the previous computer system and programs will be eliminated. The Inspector has been working on developing

a database program which, when completed, will enable specific data to be retrieved for reporting and monitoring purposes. Various form letters have been incorporated into the program, thus reducing turn around time.

Source Control and Building Division have continued working together to bring all restaurants and businesses into compliance with the grease abatement program. Out of 94 businesses required to comply with this requirement, 82 are in compliance, 4 are on a compliance schedule and 8 have been referred to the City Attorney's office for legal action, in which some are in the process of installing a grease trap.

Capital Improvement, Revenue and Operation Cost Figures

Capital improvements this fiscal year included an IBM compatible computer and printer for the Source Inspector, installation of desk, cabinets and storage in the Source Inspector's Van. Repairs included replacing rotor and stator of two (2) Moyno pumps and complete overhaul of two (2) grinders.

Revenue from vacuum truck and septic tank dumpings at the plant amounted to $35,491. The decrease from last year is due to less dumping by P.G. & E. at Diablo and haulers found other dumping sites in San Luis Obispo County.

The year's total cost for plant operation was $695,060 which does not include $153,290 for General Administration Services and $1,650,540 in reserves for emergencies and fixed asset replacement. During fiscal year 1987-88, 2,091,500,000 gallons (5.76 MGD) of wastewater was treated at a maintenance and operations cost of $332.41 per million gallons (not including general administration or reserves). This cost per million gallons is an 8.1% increase over last year due primarily to inflation. Figure 24 shows the comparative measurements of flow and costs of operation over the past fourteen years. The

cost figures do not reflect various capital outlay items during the year or the annual amount reserved for emergencies and fixed asset replacement. For comparison, the cost considering maintenance and operations, general administration services and reserves is $1194.78 per million gallons.

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
WASTEWATER TREATMENT DIVISION
EXISTING ORGANIZATION CHART

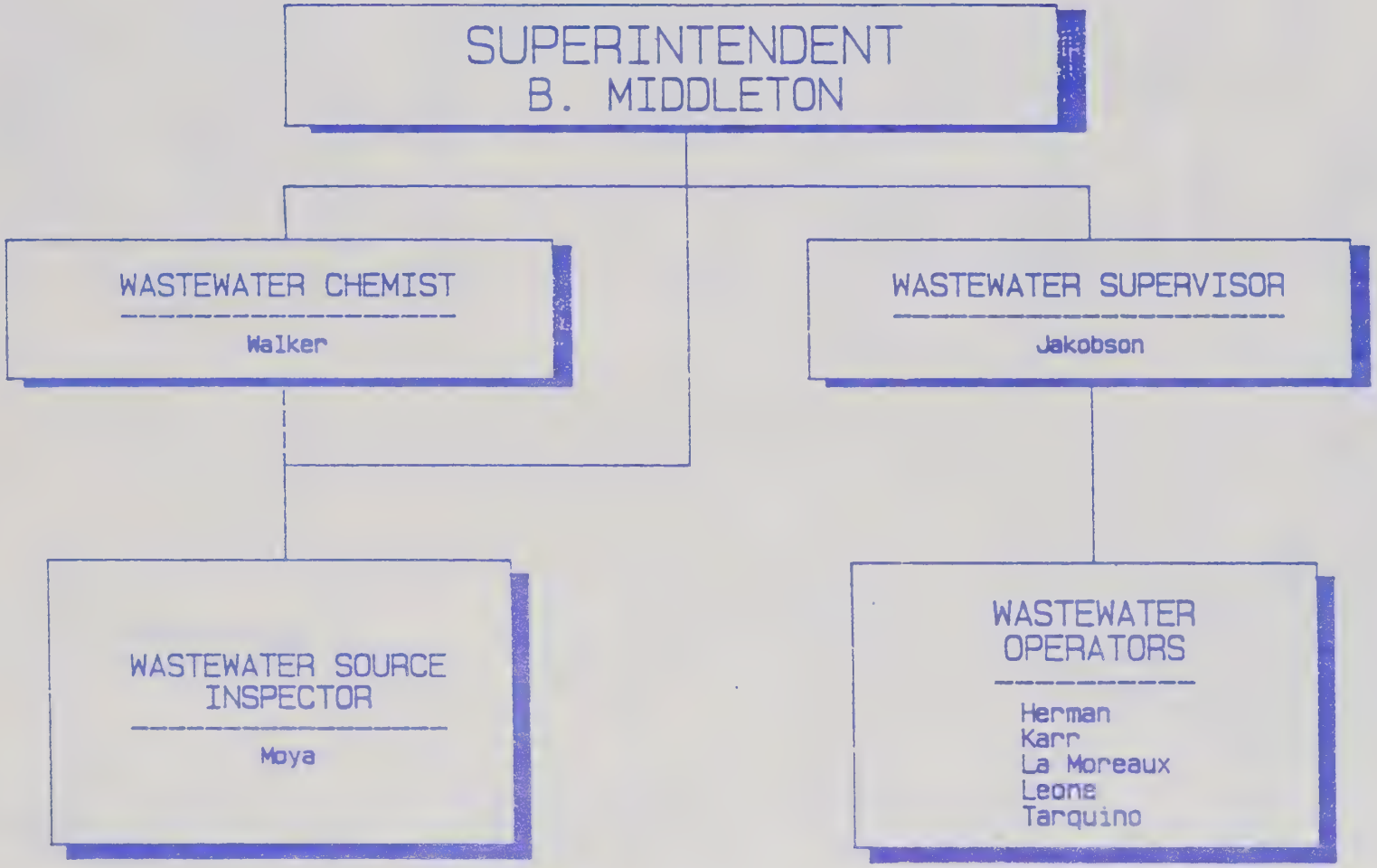


Figure 22

WASTEWATER TREATMENT PLANT LABORATORY REPORT

FISCAL YEAR JULY 1, 1987 TO JUNE 30, 1988

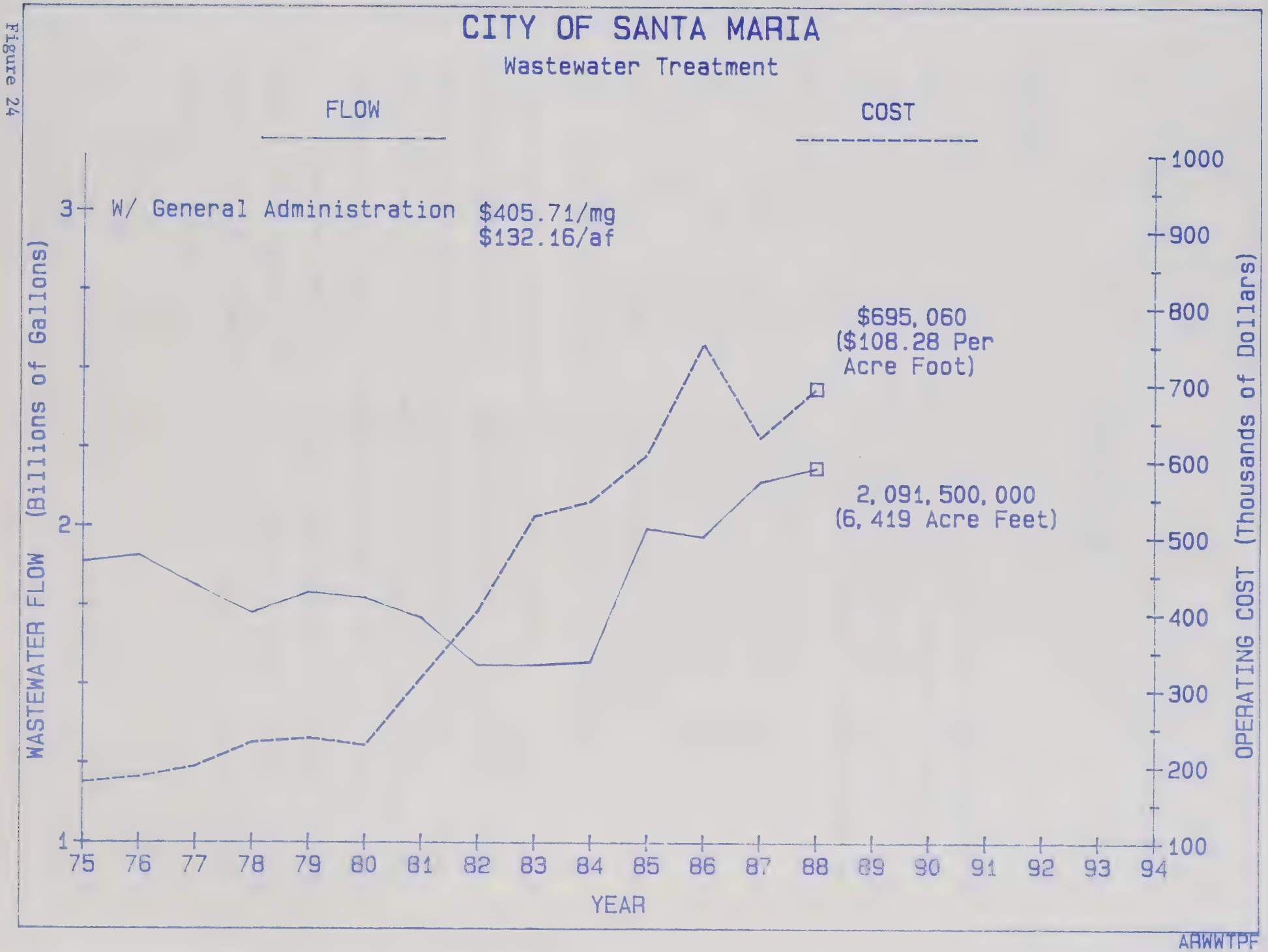
Total Flow	:	2091.5 MG
Daily Average	:	5.76 MGD (363 days)
Days	:	366 (leap year)
Gas Production Metered	:	31,083,550 Cu Ft
Daily Average	:	84,928 Cu Ft
Total Electricity Used	:	1,693,140 KHW
Daily Average	:	4,626 KHW

- WASTEWATER ANALYSIS - (mg/l unless otherwise indicated)		Total Analyses	Average	% Rem
BOD (influent)	:	45	262	
BOD (effluent)	:	52	22	92
Suspended Solids (inf)	:	46	268	
Suspended Solids (eff)	:	53	20	93
Settleable Solids (ml/l) (inf)	:	349	10.4	
Settleable Solids (ml/l) (eff)	:	349	< 0.1	
pH (no units) (inf)	:	349	7.8	
pH (no units) (eff)	:	349	7.8	
- Effluent Water Analysis -				
TDS by Conductance	:	349	1357	
Dissolved Oxygen	:	49	4.7	
Grease & Oil	:	52	0.8	
Total Dissolved Solids	:	12	1387	
Boron	:	2	0.33	
Chlorides	:	12	335	
Sulfates	:	2	344	
Sodium	:	12	242	
Total Nitrogen	:	1	29.7	
- Effluent Pond Analysis				
Total Nitrogen	:	1	15.0	

- SLUDGE ANALYSIS -		Analyses	Average
Raw Thickened Sludge			
% Solids	:	53	6.00
% Volatile Solids	:	53	76.93
#1 Sludge Digester			
Volatile Acids (mg/l)	:	52	181
Alkalinity (mg/l)	:	52	4314
pH	:	52	7.2
% Solids	:	52	2.90
% Volatile Solids	:	52	63.45
% Volatile Reduction	:		47.94
#3 Sludge Digester			
Volatile Acids (mg/l)	:	52	99
Alkalinity (mg/l)	:	52	4588
pH	:	52	7.3
% Solids	:	53	2.71
% Volatile Solids	:	53	62.80
% Volatile Reduction	:		49.38

Figure 23

Figure 24


CITY OF SANTA MARIA
Wastewater Treatment
FLOW
COST
W/ General Administration $405.71/mg
$132.16/af
$695,060
($108.28 Per
Acre Foot)
2,091,500,000
(6,419 Acre Feet)
WASTEWATER FLOW (Billions of Gallons)
OPERATING COST (Thousands of Dollars)
YEAR
1
2
3
100
200
300
400
500
600
700
800
900
1000
75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94
ARWWTPF

WATER DIVISION

Production

The water production facilities consist of 10 water wells, four booster pumps, two elevated storage reservoirs (13 MG) and two ground storage reservoirs (2.5 MG) which give the system a total combined storage capacity of 15.5 million gallons. The system also includes an electronic control panel at the Public Works Dept. office with telemetering capability which automatically controls the pumps, monitors the level of the reservoirs, and has an alarm system for equipment failures. Total production capability with all wells (except 2 AS) operational is 21.7 million gallons per day or 15,000 GPM or 66.4 AFD. However, we have lost the production of four wells; three due to unacceptable chemical findings and one due to equipment failures.

Test results from wells 3-H and 4-H have indicated nitrate levels above the maximum contaminate level. Therefore, they have been taken out of service and will not be used until further testing indicates a reduction in the nitrate level or an approved blending operation can be designed. Also, test results have continued to indicate the presence of TCE (Trichlorethylene) at Well 2-AS and even though we have a State approved method of blending, we have chosen to leave the well off. Well 9-S was not operational due to equipment failures which will be resolved with the installation of a new pump/motor combination in late 1988.

The drilling of a new well (Well 12-S) is scheduled to occur during budget period 1988-90. Total production with the remaining six wells is approximately 15.5 million gallons per day. The wells furnished an average of 10.3 million gallons per day to satisfy the customers' demands. The combined well production and reservoir capacity must also supply peak demands of 17.35 million gallons per day (highest recorded to this time period) and allow, at all times, for a reserve fire flow supply. The fiscal year total consumption was approximately 3.7 billion gallons (11,572 AF) which reflects an increase of 4% from the previous fiscal year.

For system back up for both the City's system and the California Cities Water Company's system serving mainly the unincorporated area, two interconnections exist. One is near Santa Maria Way and Miller Street and the other is on California Blvd. south of Foster Road.

Distribution

The water distribution section is responsible for transmitting water from the well source to the people. This service is provided to over 13,662 active accounts (an increase of 2.2% over last year) through a water line system which is approximately 229 miles long (an increase of 1.7% over last year). The number of accounts are now reflected more precisely than in previous annual reports which were on the high side. This section also provides the meter reading function, water billing and collection services, installation of service lines, meter maintenance and maintains all water distribution facilities in their entirety. The income from all water sold this fiscal year is shown on the following graph. Totals of various water division functions during the fiscal year 1987-88 are listed as follows:

	Function	No. Completed
1.	Water meter readings	81,972
2.	Water service turn-ons	2,886
3.	Water service turn-offs	2,752
4.	Collection (delinquent bills)	2,124
5.	Water meter re-reads	2,524
6.	Miscellaneous service calls	1,212
7.	New service line and taps installed	24
8.	Water meters installed	1,036
9.	Water meters removed	799
10.	Water meters repaired in shop	176
11.	Water meters repaired in field (minor)	487
12.	Renovation of water meter locations	982
13.	Ball valves installed	862
14.	Water meter vaults installed and replaced	109
15.	Water line leaks repaired	43
16.	Flushing dead-end stations	78
17.	Flushing fire hydrants	1,182
18.	Fire hydrant repairs, painting and maintenance	1,197
19.	Main line gate valves operated	1,814

Water Quality

On-going monitoring and testing of the City's water system is done on a routine basis to assure that the water is of good quality and is within the allowable limits of the State Department of Public Health. Chlorine gas is mixed with the water at each well which is carried throughout the system to maintain a residual of .1 PPM of free chlorine at the extremities of the distribution system. This minimum amount of free chlorine is a positive indicator that any pathogenic material that may have entered the system will be killed by exposure to the chlorine. Following is a listing of tests that are collected and analyzed to insure that the quality of the water continually meets all health standards as set forth by the State Department of Public Health. Figure 27 is a schedule showing frequency of the necessary tests for our system to comply with current State Health Dept. requirements.

1. GENERAL MINERAL: Samples are collected and analyzed annually from each well source and the distribution sampling station located in the

1400 block of East Alvin. Figure 28 is a plot of the average system concentration of total dissolved solids over recent years.

2. GENERAL PHYSICAL: Four samples are collected and analyzed per month on a rotating basis from the 14 sampling stations located through the distribution system.

3. INORGANIC CHEMICAL: Samples are collected and analyzed from three wells annually on a rotating basis so that all wells are sampled every three years.

4. BACTERIOLOGICAL: 14 samples are collected and analyzed weekly from the distribution system's 14 sampling stations.

5. TRIHALOMETHINES: One sample is collected and analyzed quarterly from the distribution sampling station which is located at N. Broadway and Preisker Lane.

6. VOLITILE ORGANICS: One sample is collected and analyzed quarterly from Well 4-H.

7. RADIOLOGICAL: Three wells are sampled and analyzed quarterly every four years; the wells sampled include one well from the South McClelland well field and two wells from the Airport well field.

Investigation is continuing into the presence of TCE (trichlorethylene) found in Well 2-AS and nitrate that was found in Wells 3-H and 4-H. An engineering report was submitted and approved by the State Health Department on November 12, 1985 that would allow a method of blending water from Well 2-AS with water from our other wells if the need to do so should occur. At this point, we have not had to use the blending option and Well 2-AS has not been

in operation. Since this well is shallow, does not have the proper sanitary seal, and is over 40 years old, the drilling of a new well (12-S) is planned and should occur during 1988-90. After investigations by the Regional Water Quality Control Board, a source of the nitrate contamination in Wells 3-H and 4-H and a source of TCE contamination in Well 2-AS may have been found. Further testing of these wells will be done to see if the problem has been corrected.

The State Department of Water Resources (DWR) staff is continuing to perform the necessary preliminary engineering and Environmental Impact Report (E.I.R.) preparation for the coastal branch of the State Water Project. Key staff representatives from the concerned entities in San Luis Obispo and Santa Barbara Counties periodically meet with DWR staff during this work effort. Currently, it is anticipated that the EIR will be in draft form in mid to late 1989 with EIR certification for the coastal branch anticipated in mid to late 1990.

The **CROSS CONNECTION CONTROL PROGRAM** is primarily a procedure to protect the public water supply from potential sources of contamination. This refers to any connection that could permit toxic or pathogenic material, or materials objectionable to taste or odor, from entering the public water system.

The following quantities of "backflow prevention" items of work were performed this past year.

Item	No. Completed
Installed	12
Replaced	33
Repaired	73
Installation Inspection	50
Survey Inspection	62
Informational Services	117
Conferences	133
Correspondence Reports	110

Figure 26 is a plot of annual revenue, costs and amount of water production. The cost per acre foot reflects costs of operation and maintenance of the system, overhead, plus repair or replacement of deficiencies in the existing system. No new capital outlay costs or bond service is included in the cost per acre foot.

The continuation of the present level of service to the public during the fiscal year 1987-88 caused the purchase of new water meters at a cost of $44,652.

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
WATER DIVISION
ORGANIZATION CHART

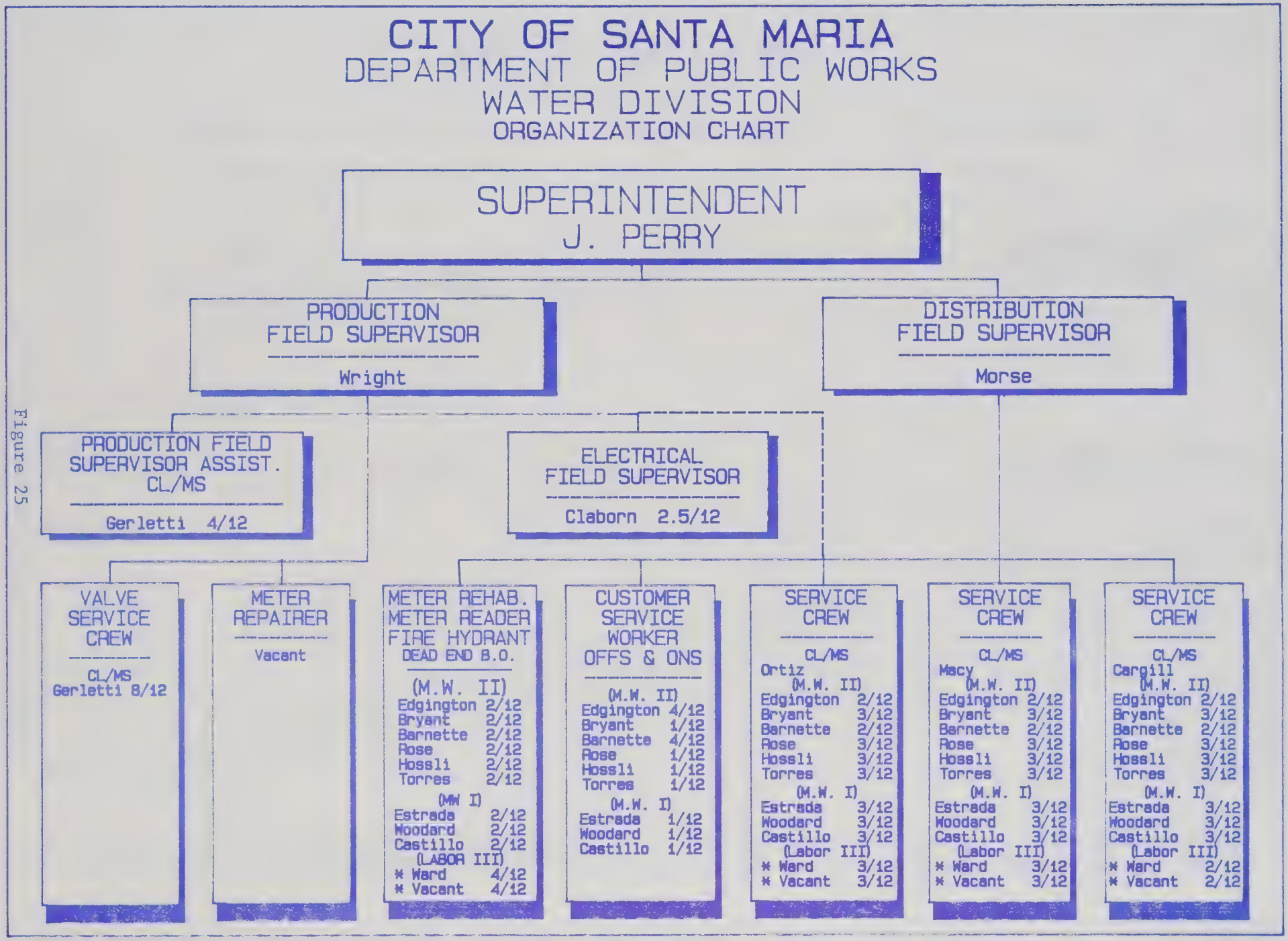


Figure 25

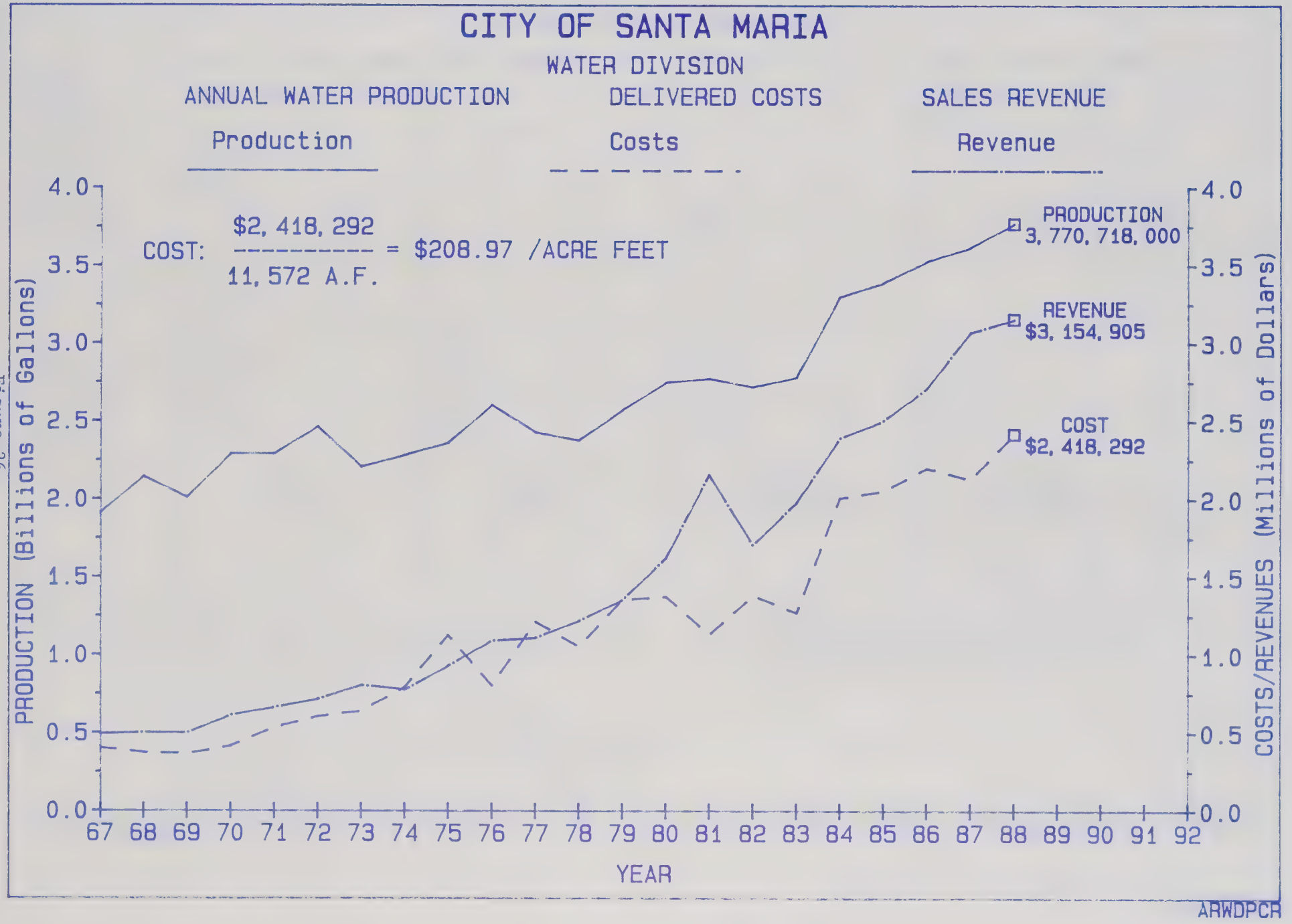
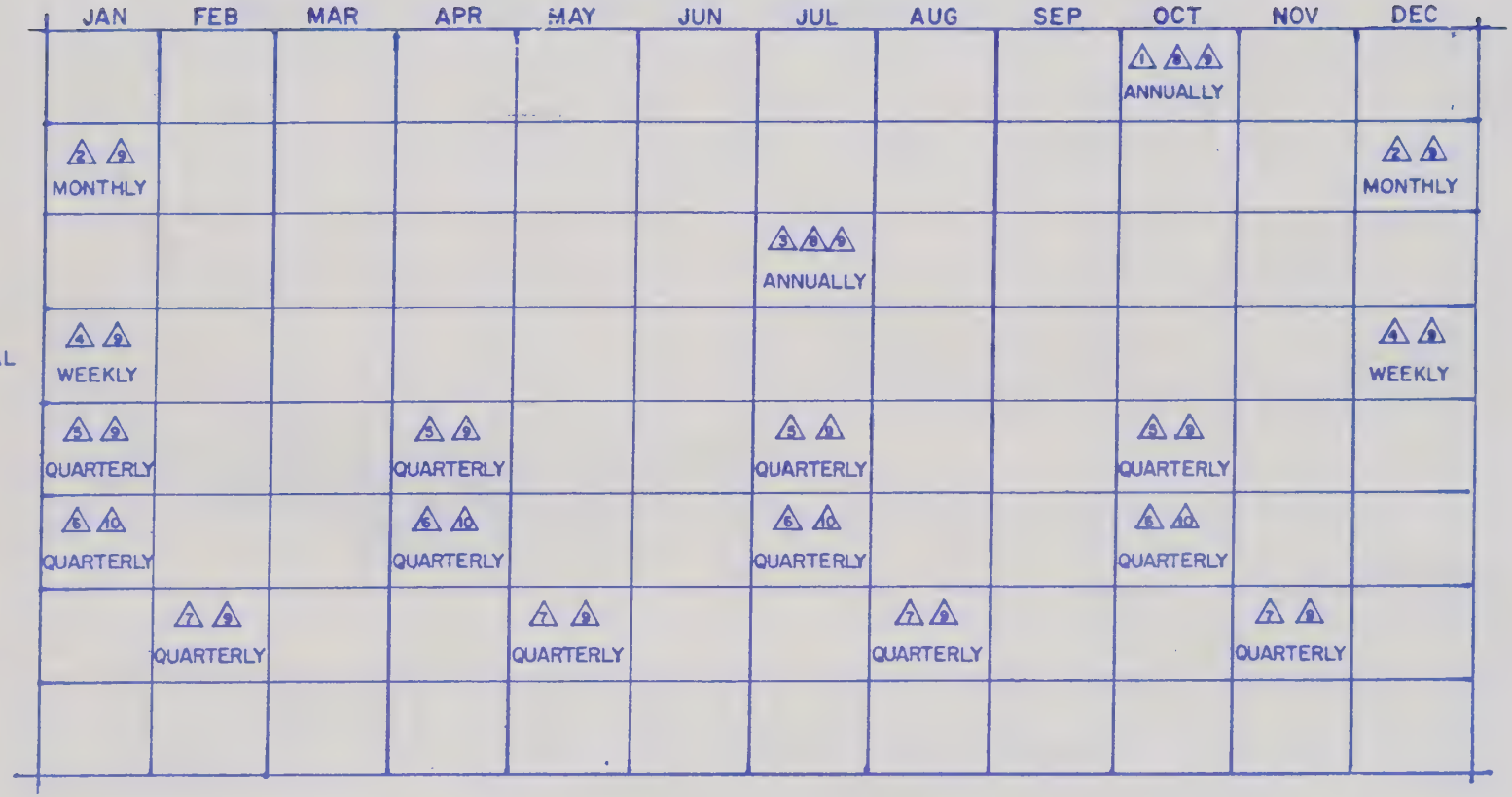

CITY OF SANTA MARIA
WATER DIVISION
ANNUAL WATER PRODUCTION
DELIVERED COSTS
SALES REVENUE
Production
Costs
Revenue
COST: $2,418,292 / 11,572 A.F. = $208.97 /ACRE FEET
PRODUCTION 3,770,718,000
REVENUE $3,154,905
COST $2,418,292
PRODUCTION (Billions of Gallons)
COSTS/REVENUES (Millions of Dollars)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92
YEAR
ARWDPCR

Figure 26

Figure 27

WATER ANALYSIS SCHEDULE



NOTES:

1. 9 WELLS AND SAMPLING STA. AT 1400 BLK. E. ALVIN ANNUALLY.
2. 4 OF 14 STATIONS MONTHLY, ROTATING SCHEDULE.
3. 3 OF 9 WELLS ANNUALLY, ROTATING SCHEDULE.
4. 14 SAMPLE STATION WEEKLY THROUGHOUT CITY.
5. N. BROADWAY SAMPLE STATION QUARTERLY (1 SAMPLE).
6. WELL 4-H QUARTERLY.
7. 3 WELL SAMPLES QUARTERLY, EVERY FOUR YEARS. SAMPLES TO INCLUDE 1 HARD WATER AND 2 SOFT WATER SAMPLES. NEXT SCHEDULED DATES 1988, 1992.
8. REQUIRED EVERY 3 YEARS, CITY ANALYSIS ANNUALLY.
9. TITLE-22, ADMINISTRATIVE CODE OF CALIFORNIA.
10. CALIFORNIA ASSEMBLY BILL 1803

CAUTION: WELL 2AS. BEFORE PRODUCING INTO SYSTEM, RUN TO WASTE AND SAMPLE FOR: GENERAL MINERAL, INORGANICS & VOLITILE ORGANICS.

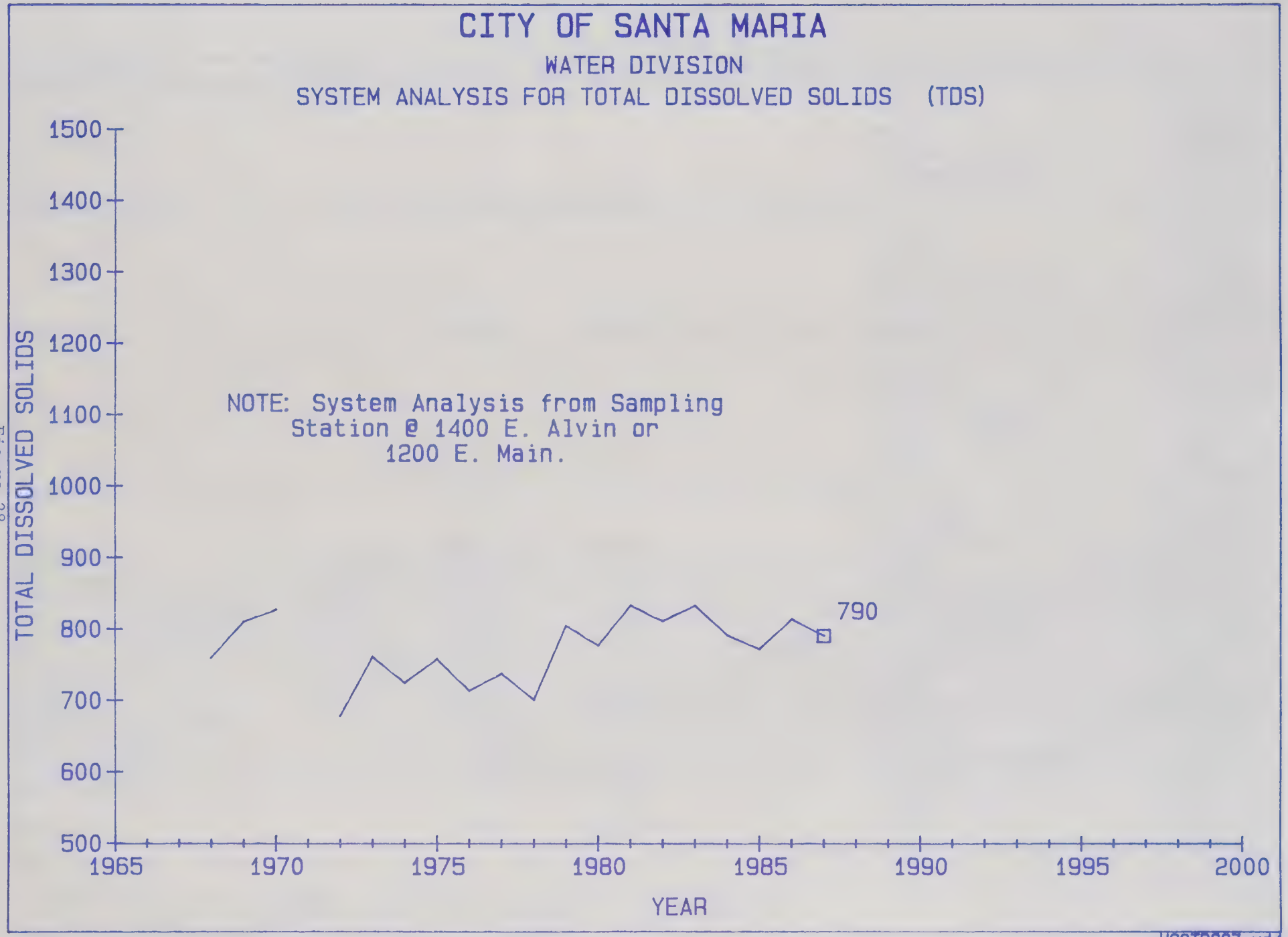

CITY OF SANTA MARIA
WATER DIVISION
SYSTEM ANALYSIS FOR TOTAL DISSOLVED SOLIDS (TDS)
TOTAL DISSOLVED SOLIDS
1500
1400
1300
1200
1100
1000
900
800
700
600
500
NOTE: System Analysis from Sampling
Station @ 1400 E. Alvin or
1200 E. Main.
790
1965
1970
1975
1980
1985
1990
1995
2000
YEAR
H2OTDS87.wd4

Figure 28

APPENDIX A
FINANCIAL INFORMATION

FISCAL YEAR EXPENDITURES

FUNCTION	OVERHEAD	OPERATIONS	CAPITAL OUTLAY	BOND SERVICE	FUND SOURCE(S)	
					General	164,396
					Water	19,780
					Refuse-Collection	13,990
					Refuse-Disposal	10,420
ADMINISTRATION		$ 213,798	$ 4,058		Sewer	9,270
					General	381,743
					Water	47,130
					Refuse-Collection	33,340
					Refuse-Disposal	24,830
BUILDINGS		$ 463,728	$ 45,405		Sewer	22,090
					General	432,247
					Water	56,270
					Refuse-Collection	39,810
					Refuse-Disposal	29,650
					Sewer	26,370
ENGINEERING		586,679	$ 5,168		Gas Tax	7,500
					General	391,038
STREETS		2,863,627	190,499		Gas Tax/TDA	2,663,088
SEWERS		131,491			Sewer	131,491
WASTEWATER	$153,290	695,063	991,910		Sewer	1,840,263
SOLID - COLLECTION/RES.	146,330	851,566	20,850		Refuse-Collection	1,018,746
WASTE - COLLECTION/COM.	85,940	480,340	33,923		Refuse-Disposal	600,203
- DISPOSAL	169,430	1,015,453	58,405	$ 5,300	Refuse-Disposal	1,248,588
DRAINAGE		53,844			General	53,844
WATER	356,590	1,794,024	535,358		Water	2,685,972
MECHANICAL MAINTENANCE		1,506,253	563,381		Equipment	2,069,634
PARKING DISTRICT		3,172			District	3,172
STOWELL CENTER		7,789			Maintenance District	7,789
PARKING AUTHORITY		317,761	2,218,556		General	2,536,317
					Trans. Devp. Act	427,407
SMAT		714,496	196,895		UMTA	401,168
					Fares	82,816

NOTE: The above information should not be used as final audit figures but are reasonably accurate for the purpose of this summary.

(D) Depreciation

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